

## Data Analysis

### MAIN BUILDING CIVIL WORKS

1 Specification Code: od170798/2019\_2020

**od170798/2019\_2020 :Mat polished finish on concrete surface by flooring the process "DENSIFIED FLOOR" Vid. as Grinding the concrete floor using Coarse, Medium diamond grinding tools for removing the latency and minor level difference and opening up the pores in concrete, Densification of the floor using hybrid densifier, Densifier reacts with the un-hydrated lime present in concrete and makes the concrete surface dense and hard.It offers many benefitssuch as reduced dusting, higher gloss readings, increased abrasion resistance, and a longer lifespan of the concrete floor. For this to achieve, the concrete floor is allowed to be saturated with densifier, sealing with external grade sealer is applied on the floor after polishing to protect the floor from the effects of weather and to make the floor water repellent and stain resistant, burnishing the floor using a floor burnisher to bring about more shine and remove excess sealer from the floor etc as per technical guidance from with HTC Sweden and Convergent Concrete Technologies, USA. This item shall be executed only by the agency which has all required manufacturing machineries and necessary expertise.**

Rate per Sq.m

Code	Description	Unit	Quantity	Rate	Amount
MR	Finish with top concrete surface of flooring by the process "DENSIFIED FLOOR" MAT FINISH quoted by contractor	sqm	1.00000	516.48	516.48
<b>TOTAL</b>					<b>516.48</b>
cost for one sqm					516.48
	say				516.48

	Add Water Charges @ 1.0%				<b>5.16</b>
	Add CPOH @ 15.0%				<b>78.24</b>
	Cost index <b>31.06 %</b>				0.00
	Total with Cost index				599.89
	Say				599.89

2 Specification Code: od18705/2019\_2020

**od18705/2019\_2020 :Supply and install externally 1st quality 60x30x1.2cm ceramic tile walls cladding of different colours, tile shall be laid and fixed to pre plastered walls in patterns, style and forms of grouting and jointing as directed by engineer using approved tile adhesive materials and pointed with approved tile**

**joint filler matching the colour of tiles.**

Details of cost for 1 sqm

Code	Description	Unit	Quantity	Rate	Amount
MR	Ceramic tile cladding	sqm	1.02500	762.70	781.77
8731	High polymer modified quickset tile adhesive	kg	10.00000	9.00	90.00
MR	Tile joint filler	kg	0.05140	55.00	2.83
0123	Mason (brick layer) 1st class	Day	0.25000	487.00	121.75
0115	Coolie	Day	0.25000	368.00	92.00
9988	Carriage and sundries	L.S	26.91000	1.73	46.55
<b>TOTAL</b>					<b>1134.90</b>
cost for one sqm					<b>1134.90</b>
	say				<b>1134.90</b>

	Add Water Charges @ 1.0%				<b>11.34</b>
	Add CPOH @ 15.0%				<b>171.93</b>
	Cost index <b>31.06 %</b>				126.37
	Total with Cost index				1444.56
	Say				1444.56

**3** Specification Code: od18706/2019\_2020

**od18706/2019\_2020 :Supply and install externally 1st quality 30x15x0.8cm brick pattern ceramic tile for walls cladding, tile shall be laid and fixed to pre plastered walls in patterns, style and forms of grouting and jointing as directed by engineer using approved tile adhesive materials and pointed with approved tile joint filler matching the colour of tiles.**

Details of cost for 1 sqm

Code	Description	Unit	Quantity	Rate	Amount
MR	brick pattern Ceramic tile cladding	sqm	1.02500	720.33	738.34
8731	High polymer modified quickset tile adhesive	kg	10.00000	9.00	90.00
MR	Tile joint filler	kg	0.05140	65.00	3.34

0123	Mason (brick layer) 1st class	Day	0.25000	487.00	121.75
0115	Coolie	Day	0.25000	368.00	92.00
9988	Carriage and sundries	L.S	26.91000	1.73	46.55

TOTAL					1091.98
cost for one sqm					1091.98
	say				1091.98

	Add Water Charges @ 1.0%				<b>10.91</b>
	Add CPOH @ 15.0%				<b>165.43</b>
	Cost index <b>31.06 %</b>				126.37
	Total with Cost index				1394.71
	Say				1394.71

4 Specification Code: od170778/2019\_2020

### Other Engineering Organisations

**od170778/2019\_2020 :Supply and fixing ready made galvanized wooden texture Powder coating/Heat transfer/Fluorocarbon laminate painted steel doors with steel jamb,SS hinges & door sill ,sheet thickness of 1to 1.4mm, Cylindrical lock, high security locking systems (Multi lock models having 11 locking points, and can be operated with a single key), honeycomb paper Infilling material, five years warranty on all the hardware and locking system as per satisfaction of site Engineer in charge.The above rate included all fixing and fittings like security locks, hinges, hardware items etc.( Cuirass/I-leaf/GM or approved equivalent.)**  
 Supply rate from quote = 1.2mx2.4m size door = 24900  
 Rate = 8645.83 per Sq.m.`

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply and fixing door	sqm	1.00000	8645.83	8645.83
MR	Transportation	sqm	1.00000	200.00	200.00
0116	Fitter(grade1)	Day	0.35000	487.00	170.45
0114	Beldar	Day	0.35000	368.00	128.80
9999	Sundries	L.S	57.81000	1.73	100.01
TOTAL					9245.09
cost for one sqm of door area					9245.09

	say				9245.09
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	Add Water Charges @ 1.0%				<b>92.45</b>
	Add CPOH @ 15.0%				<b>1400.63</b>
	Cost index <b>31.06 %</b>				144.03
	Total with Cost index				10882.21
	Say				10882.21

<b>5</b> Specification Code: od18702/2019_2020
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od18702/2019\_2020 :Supplying fully finished Pre Hung Door:- Both side HP Laminate vertical grain pattern Flush door with matching PVC <br>Wrapped WPC Jamb with front side Architrave other side Tackers. Door of 35mm thick with 4 side edges painted / Lock Hole Boring (Using mortise lock)/ Hinge Rebate Cutting (4 Nos) ,Jamb width 100 mm. Latch with Lever handles without Keys SS finish - 1 No, Hinges 4" x 3" x 3mm SS finish - 4 Nos .Tower Bolt 6" SS Finish - 1 No.(Jacsons or Approved equivalent)

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply	sqm	1.00000	7085.17	7085.17
MR	Cartage	sqm	1.00000	200.00	200.00
<b>TOTAL</b>					<b>7285.17</b>
cost for one sqm of door area					7285.17
	say				7285.17

	Add Water Charges @ 1.0%				<b>72.85</b>
	Add CPOH @ 15.0%				<b>1103.70</b>
	Cost index <b>31.06 %</b>				0.00
	Total with Cost index				8461.72
	Say				8461.72

6 Specification Code: od18716/2019\_2020

od18716/2019\_2020 :Supplying fully finished Pre Hung Door:-Both side Veneered (Sapeli/ Beech /RC Walnut/RC Teak etc) vertical grains Flush door with matching Veneer Wrapped Engineered wood Jamb (Frame) with front side Architraves and other side Tackers, all with specialised Lacquer Polish. Door of 35 mm thick with 4 side PVC Lipping / Lock Hole Boring (using mortise lock) / Hinge Rebate cutting (4 Nos.) /Extruded Sauerland core / Honey comb core filling. as per drawing and agreed schedule of rates inclusive of all applicable taxes to the satisfaction of site Engineer in charge.The above rate included all fixing and fitting lock, hinges,hardware items etc. ( Jacsons or approved equivalent)  
for 1 Sq.m

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply rate	sqm	1.00000	6844.00	6844.00
MR	Cartage	sqm	1.00000	200.00	200.00
MR	Fixing Charges	sqm	1.00000	250.00	250.00
TOTAL					7294.00
cost for one sqm					7294.00
	say				7294.00

	Add Water Charges @ 1.0%				<b>72.94</b>
	Add CPOH @ 15.0%				<b>1105.04</b>
	Cost index <b>31.06 %</b>				0.00
	Total with Cost index				8471.98
	Say				8471.98

7 Specification Code: od18717/2019\_2020

od18717/2019\_2020 :Supply 100x100x4mm thick 6.00 m long Galvanized square hollow section member (AS 1163-2009 Grade min C350L0 AS/NZS 4792 Galvanised coatings on ferrous hollow sections) fixed vertically and anchored to RC parapet and base up stand, will be given a priming coat of Zinc primer as approved by Engineer-in-charge and painted with two or more coats of epoxy paint (Shop drawings shall be submitted by the contractor to the Engineer in-charge for approval before execution).

Considering 6.00m length

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply 100x100x4mm thick 6.00 m long Galvanized square hollow section member including anchoring.	kg	73.08000	55.08	4025.25
0102	Blacksmith 1st class	Day	0.12500	487.00	60.88
0114	Beldar	Day	0.12500	368.00	46.00
1215	Welding by electric plant	cm	120.00000	2.00	240.00
0123	Mason (brick layer) 1st class	Day	0.12500	487.00	60.88
0115	Coolie	Day	0.12500	368.00	46.00
MR	Cement mortar 1:3 (1 cement : 3 fine sand).	cum	0.03000	3603.90	108.12
1213	Water proofing materials	kilogram	0.10000	35.00	3.50
13.52.1	Rate as per item number 13.52.1 of SH: Finishing	sqm	2.40000	105.47	253.12
9999	Sundries	L.S	59.00000	1.73	102.07
<b>TOTAL</b>					<b>4945.82</b>
	cost for 6.0 metre				4945.82
	cost for one metre				824.30
	say				824.30

	Add Water Charges @ 1.0%				<b>8.24</b>
	Add CPOH @ 15.0%				<b>124.88</b>
	Cost index <b>31.06 %</b>				48.85
	Total with Cost index				1006.28
	Say				1006.28

8 Specification Code: od170504/2019\_2020

od170504/2019\_2020 :Supply Cor-Ten A grade 3mm thick warm rolled perforated cassettes (ASTM A606) fixed to plastered wall spacing in the hidden plastic suspension mounts with stainless steel class A2, 35 mm

**long and 8 mm dia pins and anchor bolts etc.**

Detail of cost for 1.25mx2.5x3mm =3.125 Sq.m (Weight=23.55kg/Sq.m)

add 5% wastage area = 1.05x3.125 = 3.28 Sq.m

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply of 3mm thick cor-Ton steel cassettes including wastage	sqm	3.28000	1635.52	5364.51
MR	Perforation charges	L.S	1.00000	400.00	400.00
MR	Transportation	L.S	1.00000	500.00	500.00
9999	Sundries	L.S	217.04000	1.73	375.48
0116	Fitter(grade1)	Day	0.20000	487.00	97.40
0115	Coolie	Day	0.20000	368.00	73.60
<b>TOTAL</b>					<b>6810.99</b>
	cost for 3.125 sqm				6810.99
	cost for one sqm				2179.51
	say				2179.51

	Add Water Charges @ 1.0%				<b>21.79</b>
	Add CPOH @ 15.0%				<b>330.19</b>
	Cost index <b>31.06 %</b>				63.08
	Total with Cost index				2594.59
	Say				2594.59

9 Specification Code: od18719/2019\_2020

**od18719/2019\_2020 :Providing and Fixing in position Ply Decking in class room of approved design, shape with vertical & horizontal necessary frame work of hard wood members of approved quality, well notched & screwed, 12mm thick approved marine ply decking finished to receive marble / wood, necessary frame work, wooden packings, including necessary hardware, making holes in MS sections, etc. complete as per detail drawing and as directed by Engineer in charge. Raised floor @ 300mm ht. from FFL**  
FOR ONE Sq.m

Code	Description	Unit	Quantity	Rate	Amount
MR	Providing and Fixing	sqm	1.00000	2477.10	2477.10
TOTAL					2477.10
cost for one sqm					2477.10
	say				2477.10

	Add Water Charges @ 1.0%				<b>24.77</b>
	Add CPOH @ 15.0%				<b>375.28</b>
	Cost index <b>31.06 %</b>				0.00
	Total with Cost index				2877.15
	Say				2877.15

**10** Specification Code: od170800/2019\_2020

**od170800/2019\_2020 :Supply and fixing White Board: 4'x6' magnetic White**  
FOR ONE ITEM

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply of 4'x6' magnetic White board	each	1.00000	4200.00	4200.00
9999	Sundries	L.S	11.60000	1.73	20.07
0116	Fitter(grade1)	Day	0.10000	487.00	48.70
TOTAL					4268.77
cost for one each					4268.77
	say				4268.77

	Add Water Charges @ 1.0%				<b>42.68</b>
	Add CPOH @ 15.0%				<b>646.71</b>
	Cost index <b>31.06 %</b>				24.80
	Total with Cost index				4982.99



		Say				4982.99
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11 Specification Code: od18724/2019\_2020

od18724/2019\_2020 :Supply & Fixing square Cockroach proof Traps with CP Gratings. Unloading materials supplied at site and storing it in safe place provided in the site. (Make: ACO/SGS )

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply of trap with grating	each	1.00000	500.00	500.00
0123	Mason (brick layer) 1st class	Day	0.06300	487.00	30.68
9999	Sundries	L.S	10.00000	1.73	17.30
TOTAL					547.98
cost for one each					547.98
		say			547.98

	Add Water Charges @ 1.0%				5.47
	Add CPOH @ 15.0%				83.01
	Cost index 31.06 %				17.30
	Total with Cost index				653.79
	Say				653.79

12 Specification Code: od18726/2019\_2020

od18726/2019\_2020 :Providing and fixing 100mm dia Cleanout with Spigot, with SS 304 Square Frame & Round Frame with Flat Round Cover with Rubber Seal & SS Screw including cost and conveyance of all materials, labour charges, sundries etc complete as directed by the Engineer in charge at all levels.

Rate per each

Code	Description	Unit	Quantity	Rate	Amount
MR	Cleanout 100mm dia	no	1.00000	997.00	997.00

MR	Carriage of materials and fixing charges	L.S	13.91000	2.68	37.28
0116	Fitter(grade1)	Day	0.30000	487.00	146.10
0124	Mason (brick layer )2nd class	Day	0.30000	448.00	134.40

TOTAL					1314.78
cost for one each					1314.78
	say				1314.78

	Add Water Charges @ 1.0%				<b>13.14</b>
	Add CPOH @ 15.0%				<b>199.18</b>
	Cost index <b>31.06 %</b>				101.19
	Total with Cost index				1628.31
	Say				1628.31

13 Specification Code: od18727/2019\_2020

### Other Engineering Organisations

**od18727/2019\_2020 :Providing and fixing 75mm dia Cleanout with Spigot, with SS 304 Square Frame & Round Frame with Flat Round Cover with Rubber Seal & SS Screw including cost and conveyance of all materials, labour charges, sundries etc complete as directed by the Engineer in charge at all levels.**

Rate per each

Code	Description	Unit	Quantity	Rate	Amount
MR	Cleanout 75mm dia	no	1.00000	872.00	872.00
MR	Carriage of materials and fixing charges	L.S	13.91000	2.68	37.28
0116	Fitter(grade1)	Day	0.30000	487.00	146.10
0124	Mason (brick layer )2nd class	Day	0.30000	448.00	134.40
TOTAL					1189.78
cost for one each					1189.78
	say				1189.78

	Add Water Charges @ 1.0%				<b>11.89</b>
	Add CPOH @ 15.0%				<b>180.25</b>

	Cost index <b>31.06 %</b>				101.19
	Total with Cost index				1483.12
	Say				1483.12

14 Specification Code: od18728/2019\_2020

**od18728/2019\_2020 :Providing and fixing PVC pipes including fixing the pipe with clamps/ clip at 1.00 m spacing . This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 63 mm dia 10 Kg/cm<sup>2</sup> - External work - Exposed on wall**

Details of cost for 10 metre

MATERIALS:

Code	Description	Unit	Quantity	Rate	Amount
MR	PVC pipe 63 mm outer dia . 10kgf/cm <sup>2</sup>   (30% added for wastage and clamps etc)	metre	13.00000	136.47	1774.11
9999	Sundries   Carriage of materials	L.S	22.53000	1.73	38.98
9999	Sundries   Adhesive, and sundries etc.	L.S	10.27000	1.73	17.77
0116	Fitter(grade1)  	Day	0.32000	487.00	155.84
0114	Beldar  	Day	0.62000	368.00	228.16
0100	Bandhani  	Day	0.13000	407.00	52.91
9999	Sundries   Scaffolding etc.	L.S	30.98000	1.73	53.60
<b>TOTAL</b>					<b>2321.37</b>
	cost for 10.0 metre				2321.37
	cost for one metre				232.14
	say				232.14

	Add Water Charges @ 1.0%				<b>2.32</b>
	Add CPOH @ 15.0%				<b>35.16</b>
	Cost index <b>31.06 %</b>				19.74

	Total with Cost index				289.38
	Say				289.38

15 Specification Code: od18729/2019\_2020

od18729/2019\_2020 :Providing and fixing PVC pipes including fixing the pipe with clamps/clips at 1.00 m spacing. This included jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 75 mm dia 10Kgf/cm<sup>2</sup> - External work- Exposed on wall

Details of cost for 10.00 m

MATERIALS:

Code	Description	Unit	Quantity	Rate	Amount
MR	PVC pipe 75 mm outer dia 10kgf/cm <sup>2</sup>   (30% added for wastage and clamps etc)	metre	13.00000	193.48	2515.24
9999	Sundries   Carriage of materials	L.S	22.53000	1.73	38.98
9999	Sundries   Adhesive, and sundries etc	L.S	10.27000	1.73	17.77
0116	Fitter(grade1)  	Day	0.32000	487.00	155.84
0114	Beldar  	Day	0.62000	368.00	228.16
0100	Bandhani  	Day	0.13000	407.00	52.91
9999	Sundries   Scaffolding etc	L.S	30.98000	1.73	53.60
<b>TOTAL</b>					<b>3062.50</b>
	cost for 10.0 metre				3062.50
	cost for one metre				306.25
	say				306.25

	Add Water Charges @ 1.0%				<b>3.06</b>
	Add CPOH @ 15.0%				<b>46.39</b>
	Cost index <b>31.06 %</b>				19.74
	Total with Cost index				<b>375.45</b>

		Say				375.45
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16 Specification Code: od18730/2019\_2020

od18730/2019\_2020 :Supply, fixing, testing , commissioning 65mm dia Butterfly valve (Manual) with CI body SS disk, Nitrile rubber seal and O-ring P16 pressure rating for water circulation as specified.

For Each

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply of 65mm dia Butterfly valve	each	1.00000	2828.00	2828.00
0116	Fitter(grade1)	Day	0.47000	487.00	228.89
0114	Beldar	Day	0.47000	368.00	172.96
TOTAL					3229.85
cost for one each					3229.85
		say			3229.85

	Add Water Charges @ 1.0%				32.29
	Add CPOH @ 15.0%				489.32
	Cost index 31.06 %				144.97
	Total with Cost index				3896.44
	Say				3896.44

17 Specification Code: od18731/2019\_2020

od18731/2019\_2020 :Supply, fixing, testing , commissioning 80mm dia Butterfly valve (Manual) with CI body SS disk, Nitrile rubber seal and O-ring P16 pressure rating for water circulation as specified.

For Each

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply of 80mm dia Butterfly valve	each	1.00000	3242.00	3242.00

0116	Fitter(grade1)	Day	0.47000	487.00	228.89
0114	Beldar	Day	0.47000	368.00	172.96

TOTAL					3643.85
cost for one each					3643.85
	say				3643.85

	Add Water Charges @ 1.0%				<b>36.43</b>
	Add CPOH @ 15.0%				<b>552.04</b>
	Cost index <b>31.06 %</b>				144.97
	Total with Cost index				4377.30
	Say				4377.30

18 Specification Code: od18732/2019\_2020

**od18732/2019\_2020 :Providing and fixing PVC pipes includings jointing of pipes with one step PVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. 63 mm dia 10Kgf/cm2**

Details of cost for 10.00 meter

MATERIALS:

Code	Description	Unit	Quantity	Rate	Amount
MR	PVC pipe 63 mm outer dia. 10 kgf/cm2   Add 5% for wastage etc.	metre	10.50000	136.47	1432.94
0116	Fitter(grade1)  	Day	0.25000	487.00	121.75
0114	Beldar   Trenching and refilling etc.	Day	0.66000	368.00	242.88
0114	Beldar  	Day	0.66000	368.00	242.88
0115	Coolie  	Day	0.66000	368.00	242.88
TOTAL					2283.33
	cost for 10.0 metre				2283.33

	cost for one metre				228.33
	say				228.33

	Add Water Charges @ 1.0%				<b>2.28</b>
	Add CPOH @ 15.0%				<b>34.59</b>
	Cost index <b>31.06 %</b>				30.67
	Total with Cost index				295.88
	Say				295.88

19 Specification Code: od18733/2019\_2020

od18733/2019\_2020 :Providing and fixing PVC pipes includings of pipes with one step PVC solvent cement, trenching and refilling & testing of joints complete as per direction of Engineer in Charge. 75 mm dia 10Kgf/cm2

Details of cost for 10 metre

MATERIALS:

Other Engineering Organisations

Code	Description	Unit	Quantity	Rate	Amount
MR	PVC pipe 75 mm outer dia 10 kgf/cm2 add 5% for wastage	metre	10.50000	193.48	2031.54
0116	Fitter(grade1)  	Day	0.25000	487.00	121.75
0114	Beldar   Trenching and refilling etc.  	Day	0.66000	368.00	242.88
0114	Beldar  	Day	0.66000	368.00	242.88
0115	Coolie	Day	0.66000	368.00	242.88
<b>TOTAL</b>					<b>2881.93</b>
	cost for 10.0 metre				2881.93
	cost for one metre				288.19
	say				288.19

	Add Water Charges @ 1.0%				<b>2.88</b>
	Add CPOH @ 15.0%				<b>43.66</b>
	Cost index <b>31.06 %</b>				30.67
	Total with Cost index				365.41
	Say				365.41

20 Specification Code: od18734/2019\_2020

**od18734/2019\_2020 :Providing and fixing PVC pipes including fixing the pipe with clamps/ clips/ at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per the direction of Engineer-in-Charge 160 mm dia 6 Kgf/cm2 - External work- Exposed on wall**

Details of cost for 10.00 meter

MATERIALS:

Code	Description	Unit	Quantity	Rate	Amount
MR56	PVC pipe 150 mm outer dia 6kgf/cm2	metre	10.50000	520.00	5460.00
9999	Sundries   Carriage of materials	L.S	33.80000	1.73	58.47
9999	Sundries   Adhesive, and sundries etc	L.S	15.41000	1.73	26.66
0116	Fitter(grade1)  	Day	0.37000	487.00	180.19
0114	Beldar  	Day	0.97000	368.00	356.96
0100	Bandhani  	Day	0.13000	407.00	52.91
9999	Sundries   Scaffolding etc.	L.S	30.98000	1.73	53.60
<b>TOTAL</b>					<b>6188.79</b>
	cost for 10.0 metre				6188.79
	cost for one metre				618.88
	say				618.88

	Add Water Charges @ 1.0%				<b>6.18</b>
	Add CPOH @ 15.0%				<b>93.76</b>



	Cost index <b>31.06 %</b>				26.29
	Total with Cost index				745.12
	Say				745.12

MAIN BUILDING - ELECTRICAL WORKS					
1 Specification Code: od18615/2019_2020					

od18615/2019  
\_2020 : Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV<br>grade of following size on wall surface as required.<br>1R X 3.5C X 70 Sq.mm AYFY

Code	Description	Unit	Quantity	Rate	Amount
2862	32mm X 8mm bolts & nuts	each	350.000 00	4.00	1400.00
	Add Cartage@1.00				14.00
	total				1414.00
2809	20/25 mm X 3mm flat iron	kg	9.06000	37.80	342.47
	Add Cartage@1.00				3.42
	total				345.89
2855	Steel fastener 6 mm X 75 mm	each	336.000 00	5.00	1680.00
	Add Cartage@1.00				16.80
	total				1696.80
MR797	70 sqmm 3.5 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE	metre	100.000 00	355.93	35593.00
	Add Cartage@1.00				355.93
	Add Wastage@5.00				1779.65

		total			37728.58
Total Cost of Materials					41185.27
1001	Wireman	Day	1.25000	447.00	558.75
1005	Fitter, Grade 2	Day	0.33000	407.00	134.31
1009	Blacksmith, Grade 1	Day	0.33000	407.00	134.31
1010	Mason, Grade 2	Day	0.33000	407.00	134.31
1007	Khallasi	Day	5.00000	368.00	1840.00

	TOTAL	43986.95
	Add CPOH @ 15%	6598.04
	cost for 100.0 metre	50584.99
	cost for one metre	510.0
	Say	510.0
	Cost index <b>31.06 %</b>	22.36
	Total with Cost index	532.36
	Other Engineering Organisations Say	532.36

# PRICE

2 Specification Code: od18640/2019\_2020

Supplying and drawing of 1R x 4C x 10 Sq.mm AYFY cable through 40mm od18640/2019 medium class PVC conduit along with accessories in surface/ recess including \_2020 : cutting the wall and making good the same in case of recessed conduit as required.

Code	Description	Unit	Quantity	Rate	Amount
1227	40 mm dia. ISI marked, PVC conduit	metre	52.5000 0	47.37	2486.92
	Add Cartage@1.00				24.87
	total				2511.79
1232	40 mm PVC bends	each	4.00000	20.98	83.92

	Add Cartage@1.00				0.84
	total				84.76
1237	40 mm PVC couplers	each	15.0000 0	10.44	156.60
	Add Cartage@1.00				1.57
	total				158.17
1221	40 mm iron staples/ saddles/screws	each	85.0000 0	4.31	366.35
	Add Cartage@1.00				3.66
	total				370.01
2857	PVC fastener 40mm long	each	85.0000 0	0.28	23.80
	Add Cartage@1.00				0.24
	total				24.04
2935	Cement, paint, sand etc.	L.S	1.00000	4.50	4.50
	Add Cartage@1.00				0.05
	total				4.55
MR807	10 sqmm 4 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE	metre	50.0000 0	101.69	5084.50
	Add Cartage@1.00				50.85
	Add Wastage@5.00				254.23
	total				5389.57
Total Cost of Materials					8542.89
1001	Wireman	Day	1.50000	447.00	670.50
1010	Mason, Grade 2	Day	0.75000	407.00	305.25
1007	Khallasi	Day	2.25000	368.00	828.00

TOTAL	10346.64
Add CPOH @ 15%	1552.00
cost for 50.0 metre	11898.64
cost for one metre	239.0
Say	239.0

Cost index <b>31.06 %</b>	35.41
Total with Cost index	274.41
Say	274.41

3 Specification Code: od70745/2019\_2020

SITC of SSB 2 (Main Building 1, Workshop, Malampuzha)<br>Supply, installation , testing and commissioning of totally enclosed compartmentalized dust and vermin proof cubical segregated and modular in construction M.V. panel board free standing fabricated with 14swg and 16swg of CRCA M.S. sheet, powder coated , bus-bar chamber , outgoing switchgear etc. (all feeder unit Would be compartmentalized), color coded PVC sleeved vertical / horizontal Aluminium busbar of required size of length, (bus-bar distances shall be minimum 32 mm )  
od70745/2019 insulators, hardware, neoprene gasket , hinged door, interconnecting single core  
\_2020 : multi strand lugged copper wire having current density of 2A / sqmm of suitable capacity & size with lugs from busbar to switchgears / MCCB / MCB or where ever required, control wiring with 1 sqmm FRLS cable, ON/OFF, RYB phase indicators, two earthing terminal busbar of size 25 x 5 mm copper with nut & bolts at outside of the panel, rating and name plates for all incoming & outgoing etc. comprising with the followings as per the KEI standard. Switch gears – ABB/ Equivalent, Contactors – ABB, L&T/Equivalent. Incomer: - 125A TPN Isolator – 1 No. Outgoing: - 63A 3P MCCB – 5 No., 32A 3P MCCB – 2 No.

Code	Description	Unit	Quantity	Rate	Amount
MR1885	Red, Green, Black, Yellow, Orange colours LED indicator, AC/DC, 22.5 mm cut out dia	each	3.00000	44.07	132.21
	Add Cartage@1.00				1.32

		total				133.53
MR	100A, TPN Isolator (Make: ABB, Model no: OT100F4N2)	each	1.00000	4915.25		4915.25
	Add Cartage@1.00					49.15
		total				4964.40
MR1586	Rotary handle (including BUC handle with door inter-lock defeat and pad lock facility) Up to 250A extended type	each	8.00000	1355.93		10847.44
	Add Cartage@1.00					108.47
		total				10955.91
MR731	1.0 sqmm ISI marked FR LS PVC insulated single core copper conductor cable	metre	30.00000	7.03		210.90
	Add Cartage@1.00					2.11
	Add Wastage@5.00					10.55
		total				223.55
1106	16 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	metre	3.60000	102.36		368.50
	Add Cartage@1.00					3.68
	Add Wastage@5.00					18.42
		total				390.61
MR732	25 sqmm ISI Marked FR LS PVC insulated single core copper conductor cable	metre	9.00000	177.12		1594.08
	Add Cartage@1.00					15.94
	Add Wastage@5.00					79.70
		total				1689.72
Total Cost of Materials						18357.72
2.10.1	Rate as per item number 2.10.1 of SH: MCCB, MCB & DBS	each	3.00000	173.00		519.00

90.14.10 .1	Rate as per item number 90.14.10.1 of SH: OD Electrical	no	8.00000	3763.00	30104.00
90.14.1. 2	Rate as per item number 90.14.1.2 of SH: OD Electrical	sqm	15.1500 0	2317.00	35102.55
90.14.7	Rate as per item number 90.14.7 of SH: OD Electrical	Cum cm	720.000 00	6.00	4320.00
90.14.2. 1	Rate as per item number 90.14.2.1 of SH: OD Electrical	sqm	0.50400	2952.00	1487.81
90.14.3. 1	Rate as per item number 90.14.3.1 of SH: OD Electrical	metre	35.4200 0	46.00	1629.32
MR	Supply and providing Aluminium bus bars including finger type SMC bus bar supports in the bus chamber, suitable size nut & bolt, providing heat shrink sleeves etc. as required.	Cum cm	1827.00 000	3.00	5481.00
90.14.4	Rate as per item number 90.14.4 of SH: OD Electrical	metre	4.80000	916.00	4396.80
MR701	Electrician	Day	3.00000	750.00	2250.00
MR720	Khalasi	Day	3.00000	750.00	2250.00
1001	Wireman	Day	3.00000	447.00	1341.00

TOTAL	29679.72
Add CPOH @ 15%	16085.88
cost for one each	111691.0
Say	111691.0
Cost index <b>31.06 %</b>	24708.54
Total with Cost index	136399.54
Say	136399.54

4 Specification Code: od70746/2019\_2020

od70746/2019  
\_2020 :

SITC of SSB 1 (Main Building , L&P, Malampuzha)<br>Supply, installation , testing and commissioning of totally enclosed compartmentalized dust and vermin proof cubical segregated and modular in construction M.V. panel board free standing fabricated with 14swg and 16swg of CRCA M.S. sheet, powder coated , bus-bar chamber ,outgoing switchgear etc. (all feeder unit Would be compartmentalized), color coded PVC sleeved vertical / horizontal Aluminium busbar of required size of length, (bus-bar distances shall be minimum 32 mm ) insulators, hardware, neoprene gasket , hinged door, interconnecting single core multi strand lugged copper wire having current density of 2A / sqmm of suitable capacity & size with lugs from busbar to switchgears / MCCB / MCB or where ever required, control wiring with 1 sqmm FRLS cable, ON/OFF, RYB phase indicators, two earthing terminal busbar of size 25 x 5 mm copper with nut & bolts at outside of the panel, rating and name plates for all incoming & outgoing etc. comprising with the followings as per the KEI standard. Switch gears – ABB/ Equivalent, Contactors – ABB, L&T/Equivalent. Incomer: - 125A TPN Isolator – 1 No. Outgoing: - 40A TP MCB – 1 Nos, 32A TP MCB - 2 Nos, 50A TP MCB - 2 No, 63A TPN Isolator - 1 No.

Code	Description	Unit	Quantity	Rate	Amount
MR1885	Red, Green, Black, Yellow, Orange colours LED indicator, AC/DC, 22.5 mm cut out dia	each	3.00000	44.07	132.21
	Add Cartage@1.00				1.32
	total				133.53
MR	125A, TPN Isolator (Make: ABB, Model no: OT125F4N2)	each	1.00000	5084.75	5084.75
	Add Cartage@1.00				50.85
	total				5135.60
MR	40A, TP MCB (Make: L&T, Model no: BB30400C)	each	1.00000	1313.56	1313.56
	Add Cartage@1.00				13.14
	total				1326.70

MR	50A, TP MCB (Make: L&T, Model no: BB30500C)	each	2.00000	1313.56	2627.12
	Add Cartage@1.00				26.27
	total				2653.39
1715	63 amps., 4 pole isolator	each	1.00000	519.00	519.00
	Add Cartage@1.00				5.19
	total				524.19
MR731	1.0 sqmm ISI marked FR LS PVC insulated single core copper conductor cable	metre	30.00000 0	7.03	210.90
	Add Cartage@1.00				2.11
	Add Wastage@5.00				10.55
	total				223.55
1106	16 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	metre	7.20000	102.36	736.99
	Add Cartage@1.00				7.37
	Add Wastage@5.00				36.85
	total				781.21
MR732	25 sqmm ISI Marked FR LS PVC insulated single core copper conductor cable	metre	3.60000	177.12	637.63
	Add Cartage@1.00				6.38
	Add Wastage@5.00				31.88
	total				675.89
Total Cost of Materials					11454.06
2.10.1	Rate as per item number 2.10.1 of SH: MCCB, MCB & DBS	each	3.00000	173.00	519.00
2.10.4	Rate as per item number 2.10.4 of SH: MCCB, MCB & DBS	each	2.00000	700.00	1400.00



90.14.1.2	Rate as per item number 90.14.1.2 of SH: OD Electrical	sqm	11.6300 0	2317.00	26946.71
90.14.7	Rate as per item number 90.14.7 of SH: OD Electrical	Cum cm	544.000 00	6.00	3264.00
90.14.2.1	Rate as per item number 90.14.2.1 of SH: OD Electrical	sqm	0.22100	2952.00	652.39
90.14.3.1	Rate as per item number 90.14.3.1 of SH: OD Electrical	metre	26.4500 0	46.00	1216.70
MR	Supply and providing Aluminium bus bars including finger type SMC bus bar supports in the bus chamber, suitable size nut & bolt, providing heat shrink sleeves etc. as required.	Cum cm	960.000 00	3.00	2880.00
90.14.4	Rate as per item number 90.14.4 of SH: OD Electrical	metre	4.20000	916.00	3847.20
MR701	Electrician	Day	2.50000	750.00	1875.00
MR720	Khalasi	Day	2.50000	750.00	1875.00
1001	Wireman	Day	2.50000	447.00	1117.50

TOTAL		19201.56
Add CPOH @ 15%		8557.13
cost for one each		59928.0
Say		59928.0
Cost index <b>31.06 %</b>		12620.61
Total with Cost index		72548.61
Say		72548.61

5 Specification Code: od70747/2019\_2020

od70747/2019\_2020 : SITC of MDB 1 (Main Building-1, Malampuzha)<br>Supply, installation , testing and commissioning of totally enclosed compartmentalized dust and vermin proof cubical segregated and modular in construction M.V. panel board free standing

fabricated with 14swg and 16swg of CRCA M.S. sheet, powder coated, busbar chamber, outgoing switchgear etc. (all feeder unit would be compartmentalized), color-coded PVC sleeved vertical / horizontal Aluminium busbar of required size of length, (bus-bar distances shall be minimum 32 mm) insulators, hardware, neoprene gasket, hinged door, interconnecting single core multi strand lugged copper wire having current density of 2A / sqmm of suitable capacity & size with lugs from busbar to switchgears / MCCB / MCB or where ever required, control wiring with 1 sqmm FRLS cable, ON/OFF, RYB phase indicators, two earthing terminal busbar of size 25 x 5 mm copper with nut & bolts at outside of the panel, rating and name plates for all incoming & outgoing etc comprising with the followings as per the KEI standard. Switch gears – ABB/ Equivalent, Contactors – ABB, L&T/Equivalent. Incomer: - 250A TPN Isolator – 1 No. Outgoing: - 125A 3P MCCB – 1 No., 100A 3P MCCB – 3 No., 63A 3P MCCB – 2 No., 40A SP MCCB – 1 No.

Code	Description	Unit	Quantity	Rate	Amount
MR1885	Red, Green, Black, Yellow, Orange colours LED indicator, AC/DC, 22.5 mm cut out dia	each	3.00000	44.07	132.21
	Add Cartage@1.00				1.32
	total				133.53
MR	250A, TPN Isolator (Make: ABB, OT250E04P)	each	1.00000	10169.50	10169.50
	Add Cartage@1.00				101.70
	total				10271.20
MR	125A, 25kA, 3P MCCB (Make: ABB, Model no: 1SDA066720R1)	each	1.00000	3025.42	3025.42
	Add Cartage@1.00				30.25
	total				3055.67
MR1586	Rotary handle (including BUC handle with door inter-lock defeat and pad lock facility) Up to 250A extended type	each	7.00000	1355.93	9491.51
	Add Cartage@1.00				94.92

		total			9586.43
MR731	1.0 sqmm ISI marked FR LS PVC insulated single core copper conductor cable	metre	30.0000 0	7.03	210.90
	Add Cartage@1.00				2.11
	Add Wastage@5.00				10.55
		total			223.55
MR732	25 sqmm ISI Marked FR LS PVC insulated single core copper conductor cable	metre	3.60000	177.12	637.63
	Add Cartage@1.00				6.38
	Add Wastage@5.00				31.88
		total			675.89
Total Cost of Materials					23946.27
2.10.1	Rate as per item number 2.10.1 of SH: MCCB, MCB & DBS	each	3.00000	173.00	519.00
90.14.10.2	Rate as per item number 90.14.10.2 of SH: OD Electrical	no	6.00000	4771.00	28626.00
90.14.1.2	Rate as per item number 90.14.1.2 of SH: OD Electrical	sqm	17.1465 0	2317.00	39728.44
90.14.7	Rate as per item number 90.14.7 of SH: OD Electrical	Cum cm	746.000 00	6.00	4476.00
90.14.2.1	Rate as per item number 90.14.2.1 of SH: OD Electrical	sqm	0.56700	2952.00	1673.78
90.14.3.1	Rate as per item number 90.14.3.1 of SH: OD Electrical	metre	38.1800 0	46.00	1756.28
MR	Supply and providing Aluminium bus bars including finger type SMC bus bar supports in the bus chamber, suitable size nut & bolt, providing heat shrink sleeves etc. as required.	Cum cm	2400.00 000	3.00	7200.00

90.14.4	Rate as per item number 90.14.4 of SH: OD Electrical	metre	4.80000	916.00	4396.80
MR701	Electrician	Day	3.00000	750.00	2250.00
MR720	Khalasi	Day	3.00000	750.00	2250.00
1001	Wireman	Day	3.00000	447.00	1341.00

TOTAL		36987.27
Add CPOH @ 15%		17724.54
cost for one each		123712.0
Say		123712.0
Cost index <b>31.06 %</b>		25692.52
Total with Cost index		149404.52
Say		149404.52

6 Specification Code: od70760/2019\_2020

### Other Engineering Organisations

SITC of SSB 5 (Malampuzha) Supply, installation, testing and commissioning of totally enclosed compartmentalized dust and vermin proof cubical segregated and modular in construction M.V. panel board free standing fabricated with 14swg and 16swg of CRCA M.S. sheet, powder coated, bus-bar chamber, outgoing switchgear etc. (all feeder unit Would be compartmentalized), color coded PVC sleeved vertical / horizontal Aluminium busbar of required size of length, (bus-bar distances shall be minimum 32 mm) insulators, hardware, neoprene gasket, od70760/2019 hinged door, interconnecting single core multi strand lugged copper wire having  
\_2020 : current density of 2A / sqmm of suitable capacity & size with lugs from busbar to switchgears / MCCB / MCB or where ever required, control wiring with 1 sqmm FRLS cable, ON/OFF, RYB phase indicators, two earthing terminal busbar of size 25 x 5 mm copper with nut & bolts at outside of the panel, rating and name plates for all incoming & outgoings etc. comprising with the followings as per the KEI standard. Switch gears – ABB/ Equivalent, Contactors – ABB, L&T/Equivalent. Incomer: - 250A TPN Isolator – 1 No. Outgoing: - 63A 3P MCB – 3 No., 32A 3P MCB – 1 No. 63A, 3P MCCB - 4 Nos, 160A, 3P MCCB - 1 no.

Code	Description	Unit	Quantity	Rate	Amount
MR1885	Red, Green, Black, Yellow, Orange colours LED indicator, AC/DC, 22.5 mm cut out dia	each	3.00000	44.07	132.21
	Add Cartage@1.00				1.32
	total				133.53
MR	250A TPN Isolator (Make: ABB, Model no: OT250E04P)	each	1.00000	10169.49	10169.49
	Add Cartage@1.00				101.69
	total				10271.18
MR1340	40 A to 63 A, TP MCB (C curve), 10 kA breaking capacity	each	4.00000	1302.54	5210.16
	Add Cartage@1.00				52.10
	total				5262.26
MR	160A, 16kA 3P MCCB (Make: ABB, Model no: 1SDA066549R1)	each	1.00000	5542.37	5542.37
	Add Cartage@1.00				55.42
	total				5597.79
MR1586	Rotary handle (including BUC handle with door inter-lock defeat and pad lock facility) Up to 250A extended type	each	5.00000	1355.93	6779.65
	Add Cartage@1.00				67.80
	total				6847.45
MR731	1.0 sqmm ISI marked FR LS PVC insulated single core copper conductor cable	metre	20.00000	7.03	140.60
	Add Cartage@1.00				1.41
	Add Wastage@5.00				7.03
	total				149.04

MR732	25 sqmm ISI Marked FR LS PVC insulated single core copper conductor cable	metre	1.80000	177.12	318.82
	Add Cartage@1.00				3.19
	Add Wastage@5.00				15.94
	total				337.94
1106	16 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	metre	12.60000	102.36	1289.74
	Add Cartage@1.00				12.90
	Add Wastage@5.00				64.49
	total				1367.12
Total Cost of Materials					29966.31
2.10.1	Rate as per item number 2.10.1 of SH: MCCB, MCB & DBS	each	3.00000	173.00	519.00
90.14.10.1	Rate as per item number 90.14.10.1 of SH: OD Electrical	no	4.00000	3763.00	15052.00
90.14.1.2	Rate as per item number 90.14.1.2 of SH: OD Electrical	sqm	12.80000	2317.00	29657.60
90.14.7	Rate as per item number 90.14.7 of SH: OD Electrical	Cum cm	604.00000	6.00	3624.00
90.14.2.1	Rate as per item number 90.14.2.1 of SH: OD Electrical	sqm	0.28400	2952.00	838.37
90.14.3.1	Rate as per item number 90.14.3.1 of SH: OD Electrical	metre	27.26000	46.00	1253.96
MR	Supply and providing Aluminium bus bars including finger type SMC bus bar supports in the bus chamber, suitable size nut & bolt, providing heat shrink sleeves etc. as required.	Cum cm	1566.00000	3.00	4698.00
90.14.4	Rate as per item number 90.14.4 of SH: OD Electrical	metre	4.20000	916.00	3847.20

MR701	Electrician	Day	3.00000	750.00	2250.00
MR720	Khalasi	Day	3.00000	750.00	2250.00
1001	Wireman	Day	3.00000	447.00	1341.00

	TOTAL	40505.31
	Add CPOH @ 15%	14294.62
	cost for one each	101373.0
	Say	101373.0
	Cost index <b>31.06 %</b>	17985.60
	Total with Cost index	119358.60
	Say	119358.60

7 Specification Code: od70750/2019\_2020

SITC of SSB 4 (Main Building 1, UPS, Malampuzha) Supply, installation , testing and commissioning of totally enclosed compartmentalized dust and vermin proof cubical segregated and modular in construction M.V. panel board free standing fabricated with 14swg and 16swg of CRCA M.S. sheet, powder coated , bus-bar chamber , outgoing switchgear etc. (all feeder unit Would be compartmentalized), color coded PVC sleeved vertical / horizontal Aluminium busbar of required size of length, (bus-bar distances shall be minimum 32 mm )  
 od70750/2019 insulators, hardware, neoprene gasket , hinged door, interconnecting single core  
 \_2020 : multi strand lugged copper wire having current density of 2A / sqmm of suitable capacity & size with lugs from busbar to switchgears / MCCB / MCB or where ever required, control wiring with 1 sqmm FRLS cable, ON/OFF, RYB phase indicators, two earthing terminal busbar of size 25 x 5 mm copper with nut & bolts at outside of the panel, rating and name plates for all incoming & outgoing etc. comprising with the followings as per the KEI standard. Switch gears – ABB/ Equivalent, Contactors – ABB, L&T/Equivalent. Incomer: - 100A TPN Isolator – 1 No. Outgoing: - 20A 3P MCB – 7 No., 32A 3P MCB – 1 No.

Code	Description	Unit	Quantity	Rate	Amount
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MR1885	Red, Green, Black, Yellow, Orange colours LED indicator, AC/DC, 22.5 mm cut out dia	each	3.00000	44.07	132.21
	Add Cartage@1.00				1.32
	total				133.53
MR	100A, TPN Isolator (Make: ABB, Model no. OT100F4N2)	each	1.00000	4915.25	4915.25
	Add Cartage@1.00				49.15
	total				4964.40
1105	10 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	metre	30.00000	66.43	1992.90
	Add Cartage@1.00				19.93
	Add Wastage@5.00				99.65
	total				2112.47
Total Cost of Materials					7210.4
2.10.1	Rate as per item number 2.10.1 of SH: MCCB, MCB & DBS	each	3.00000	173.00	519.00
2.10.4	Rate as per item number 2.10.4 of SH: MCCB, MCB & DBS	each	8.00000	700.00	5600.00
90.14.1.2	Rate as per item number 90.14.1.2 of SH: OD Electrical	sqm	15.00000	2317.00	34755.00
90.14.7	Rate as per item number 90.14.7 of SH: OD Electrical	Cum cm	720.00000	6.00	4320.00
90.14.2.1	Rate as per item number 90.14.2.1 of SH: OD Electrical	sqm	0.50000	2952.00	1476.00
90.14.3.1	Rate as per item number 90.14.3.1 of SH: OD Electrical	metre	35.00000	46.00	1610.00



MR	Supply and providing Aluminium bus bars including finger type SMC bus bar supports in the bus chamber, suitable size nut & bolt, providing heat shrink sleeves etc. as required.	Cum cm	1600.00 000	3.00	4800.00
90.14.4	Rate as per item number 90.14.4 of SH: OD Electrical	metre	4.80000	916.00	4396.80
MR701	Electrician	Day	2.50000	750.00	1875.00
MR720	Khalasi	Day	2.50000	750.00	1875.00
1001	Wireman	Day	2.50000	447.00	1117.50

TOTAL		16877.9
Add CPOH @ 15%		10433.21
cost for one each		72086.0
Say		72086.0
Cost index <b>31.06 %</b>		17515.04
Total with Cost index		89601.04
Say		89601.04

8 Specification Code: od18680/2019\_2020

od18680/2019\_2020 : Supply of 50 sqmm 3.5 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE

Code	Description	Unit	Quantity	Rate	Amount
MR796	50 sqmm 3.5 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE	metre	1.00000	262.71	262.71

	Add Cartage@1.00				2.63
		total			265.34

				TOTAL	265.34
				Add CPOH @ 15%	39.80
				cost for one metre	306.0
				Say	306.0
				Cost index <b>31.06 %</b>	.00
				Total with Cost index	306.00
				Say	306.00

9 Specification Code: od18684/2019\_2020

od18684/2019  
\_2020 : Supply of 3.5C X 150 Sq.mm AYFY Cable

Code	Description	Unit	Quantity	Rate	Amount
MR800	150 sqmm 3.5 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE	metre	1.00000	652.54	652.54
	Add Cartage@1.00				6.53
		total			659.07
				TOTAL	659.07
				Add CPOH @ 15%	98.86
				cost for one metre	759.0
				Say	759.0
				Cost index <b>31.06 %</b>	.00
				Total with Cost index	759.00

Say	759.00
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10 Specification Code: od18691/2019\_2020

od18691/2019  
\_2020 : Supply of 35 sqmm 3.5 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE

Code	Description	Unit	Quantity	Rate	Amount
MR795	35 sqmm 3.5 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE	metre	1.00000	203.39	203.39
	Add Cartage@1.00				2.03
	total				205.42
TOTAL					205.42
Add CPOH @ 15%					30.81
cost for one metre					237.0
Say					237.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					237.00
Say					237.00

11 Specification Code: od18693/2019\_2020

od18693/2019  
\_2020 : Supply of 25 sqmm 4 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE

Code	Description	Unit	Quantity	Rate	Amount
MR809	25 sqmm 4 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE	metre	1.00000	173.73	173.73
	Add Cartage@1.00				1.74
	total				175.47
TOTAL					175.47
Add CPOH @ 15%					26.32
cost for one metre					202.0
Say					202.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					202.00
Say					202.00

12 Specification Code: od18698/2019\_2020

od18698/2019\_2020 : Supply of 16 sqmm 4 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE

Code	Description	Unit	Quantity	Rate	Amount
MR808	16 sqmm 4 core PVC/XLPE insulated armoured cable with aluminium conductors for working voltages up to and including 1100 volts conforming IS 1584/part I/1988 for PVC IS 7098 part I for XLPE	metre	1.00000	131.36	131.36
	Add Cartage@1.00				1.31

		total				132.67
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					TOTAL	132.67
					Add CPOH @ 15%	19.90
					cost for one metre	153.0
					Say	153.0
					Cost index <b>31.06 %</b>	.00
					Total with Cost index	153.00
					Say	153.00

13 Specification Code: od70142/2019\_2020

od70142/2019 Supply, installation, testing and commissioning of 5W LED wall light working on  
\_2020 : 230V, 50 Hz AC, including giving connections as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	5W LED lamp, working on 240V, 50Hz AC. (Make: Havells, Model no: LHLDEUEEMK8R005)	each	1.00000	110.17	110.17
	Add Cartage@1.00				1.10
	total				111.27
Total Cost of Materials					111.27
90.3.13	Rate as per item number 90.3.13 of SH: OD Electrical	each	1.00000	82.00	82.00
1.34	Rate as per item number 1.34 of SH: Wiring	each	1.00000	75.00	75.00
TOTAL					111.27
Add CPOH @ 15%					40.24
cost for one each					285.0
Say					285.0

Cost index <b>31.06 %</b>	48.76
Total with Cost index	333.76
Say	333.76

14 Specification Code: od70143/2019\_2020

od70143/2019 SITC of Rust Resistant and Weather-Proof Bulk head light fixture with 9W LED  
\_2020 : lamp, IP 65 protection complete with all other accessories as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	9W LED lamp, working on 230V, 50Hz AC. (Make: Havells, Model no: LHLDEUEEMC8R009)	each	1.00000	127.12	127.12
	Add Cartage@1.00				1.27
	total				128.39
MR	Rust Resistant and Weather-Proof Bulk head light fixture IP 65 protection complete with all other accessories as required. (Make: Havells, model no.LHKL01160099)	each	1.00000	322.03	322.03
	Add Cartage@1.00				3.22
	total				325.25
Total Cost of Materials					453.64
90.3.13	Rate as per item number 90.3.13 of SH: OD Electrical	each	1.00000	82.00	82.00
TOTAL					453.64
Add CPOH @ 15%					80.35
cost for one no					604.0
Say					604.0
Cost index <b>31.06 %</b>					25.47

Total with Cost index	629.47
Say	629.47

15 Specification Code: od18721/2019\_2020

od18721/2019\_2020 : Supply, installation , testing and commissioning of exhaust fans of size up to 450mm in the existing opening, fixing necessary anchor bolts / bolt and nuts etc., as required including giving connections with the supplied wire along with the exhaust fan.<br>300/305 mm sweep Light Duty Exhaust fan in metal frame working on 230 V A/C

Code	Description	Unit	Quantity	Rate	Amount
2860	6 mm dia rivet/ stud/ bolts and nuts	each	4.00000	3.00	12.00
	Add Cartage@1.00				0.12
	total				12.12
MR1198	300/305 mm sweep Light Duty Exhaust fan in metal frame working on 230 V A/C	each	1.00000	1266.95	1266.95
	Add Cartage@1.00				12.67
	total				1279.62
Total Cost of Materials					1291.74
1001	Wireman	Day	0.33000	447.00	147.51
MR719	Wireman Helper	Day	0.33000	600.00	198.00
TOTAL					1637.25
Add CPOH @ 15%					245.59
cost for one each					1885.0
Say					1885.0
Cost index <b>31.06 %</b>					56.84
Total with Cost index					1941.84
Say					1941.84

16 Specification Code: od18723/2019\_2020

od18723/2019  
\_2020 :

Supply, conveyance, installation, testing and commissioning of ceiling fans of the following sizes using standard accessories excluding resistance type regulator, wiring the down rod with 16/0.20mm PVC insulated and PVC sheathed 650/1100V grade 3 core round copper conductor flex wire or with extended original wiring etc. as required.<br>1400mm sweep ceiling fan complete with 300mm down rod , canopies, shackles and blades and resistance type regulator working on 230V/240V single phase A/C

Code	Description	Unit	Quantity	Rate	Amount
MR1186	1400 mm Sweep Ceiling fan, complete with 300mm down rod, canopies, shackles and blades and resistance type regulator working on 230/240V single phase A/C	each	1.00000	1355.93	1355.93
	Add Cartage@1.00				13.56
	total				1369.49
Total Cost of Materials					1369.49
90.4.3	Rate as per item number90.4.3of SH:OD Electrical	each	1.00000	164.00	164.00
TOTAL					1369.49
Add CPOH @ 15%					230.02
cost for one each					1742.0
Say					1742.0
Cost index <b>31.06 %</b>					50.94
Total with Cost index					1792.94
Say					1792.94

17 Specification Code: od70874/2019\_2020



od70874/2019 SITC o 20 kVA UPS with battery bank etc with all accessories having a back of 1  
\_2020 : hours

Code	Description	Unit	Quantity	Rate	Amount
MR	SITC o 20 kVA UPS with battery bank etc with all accessories having a back of 1 hours	no	1.00000	474576.50	474576.50
TOTAL					474576.5
cost for one no					474577.0
Say					474577.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					474577.00
Say					474577.00

MAIN BUILDING TYPE 1 FIRE FIGHTING WORKS

1 Specification Code: od19541/2019\_2020

od19541/2019  
\_2020 :  
M.S Hose Cabinet : - Providing & fixing M.S Hose cabinet door with powder coating of postal red color (of size minimum 1200mm wide, 2100mm height) made of M.S sheet 14 G with glass front door and locking arrangement to accommodate 2-hoses, one branch pipe and to accommodate F.A. hose reel in addition for internal hydrant complete as per direction of Engineer incharge.<br>

Code	Description	Unit	Quantity	Rate	Amount
MR	Miscellaneous items (Lock, Standpost etc.)	L.S	1.00000	392.00	392.00
MR	Paints and accessories	L.S	1.00000	629.00	629.00
MR2335	Hose Cabinet- Single	each	1.00000	2542.00	2542.00
	Add Cartage@1.00				25.42
	total				2567.42
Total Cost of Materials					3588.42

1004	Fitter, Grade 1	Day	1.00000	447.00	447.00
1087	Welder	Day	2.00000	447.00	894.00

TOTAL					4929.42
Add CPOH @ 15%					739.41
cost for one each					5669.0
Say					5669.0
Cost index <b>31.06 %</b>					478.95
Total with Cost index					6147.95
Say					6147.95

2 Specification Code: od19543/2019\_2020

od19543/2019  
\_2020 :

FIRE HOSE REEL : - Providing and fixing first aid hose reel full swinging type with 30 m length x 20 mm dia rubber lined pipe with ABS plastic shut off nozzle of 6 mm dia. The hose reel shall conform to IS requirements. Rate shall include 25 mm dia pipe connection from riser to hose reel including flexible pipe, sockets, nipples, elbows and 25 mm ball valve. Make: Newage/SRI/Monsher"

Code	Description	Unit	Quantity	Rate	Amount
MR	Swinging fittings	L.S	1.00000	266.00	266.00
MR	25mm dia GM valve	each	1.00000	401.00	401.00
MR	Connections for Valve	L.S	1.00000	177.00	177.00
MR2338	Hose reel	each	1.00000	6992.00	6992.00
	Add Cartage@1.00				69.92
	total				7061.92
Total Cost of Materials					7905.92
1004	Fitter, Grade 1	Day	0.50000	447.00	223.50
1016	Mate	Day	0.50000	368.00	184.00
TOTAL					8313.42

Add CPOH @ 15%	1247.01
cost for one each	9560.0
Say	9560.0

Cost index <b>31.06 %</b>	145.36
Total with Cost index	9705.36
Say	9705.36

3 Specification Code: od19545/2019\_2020

od19545/2019  
\_2020 :

Supplying and fixing stainless steel Single headed internal hydrant valves with instantaneous stainless steel couplings of 63mm dia. With cast iron wheel ISI marked conforming to IS 5290 (Type-A) with blank stainless steel cap and chain, stainless steel orifice plate for reducing the pressure upto 3.5 kg/cm<sup>2</sup> at outlet.  
Make:- ISI Approved

Code	Description	Unit	Quantity	Rate	Amount
MR	Nuts Bolts, Washers, Gasket etc.	L.S	1.00000	533.36	533.36
MR2333	Hydrant Valve - Single	each	1.00000	6186.00	6186.00
	Add Cartage@1.00				61.86
	total				6247.86
Total Cost of Materials					6781.22
1004	Fitter, Grade 1	Day	0.30000	447.00	134.10
1016	Mate	Day	0.50000	368.00	184.00
TOTAL					7099.32
Add CPOH @ 15%					1064.90
cost for one each					8164.0
Say					8164.0
Cost index <b>31.06 %</b>					113.68
Total with Cost index					8277.68

Say	8277.68
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4 Specification Code: od19575/2019\_2020

od19575/2019  
\_2020 : Providing 63mm (2½ )" dia 15 m long canvas hose pipe complete with stainless steel male & female coupling stainless steel wire wound with the pipe The pipe shall confirm to IS. 4927. Make: ISI Approved.

Code	Description	Unit	Quantity	Rate	Amount
MR	Canvas Hose 15m hose with instantaneous coupling	each	1.00000	4320.00	4320.00
Total Cost of Materials					4320.0
1004	Fitter, Grade 1	Day	0.40000	447.00	178.80
1016	Mate	Day	0.40000	368.00	147.20
TOTAL					4646.0
Add CPOH @ 15%					696.90
cost for one each					5343.0
Say					5343.0
Cost index <b>31.06 %</b>					116.47
Total with Cost index					5459.48
Say					5459.48

5 Specification Code: od19563/2019\_2020

od19563/2019  
\_2020 : Providing and fixing 63 mm dia standard stainless steel short Branch Pipe female instantaneous inlet, male threaded outlet, complete with hexagonal base nozzle as per IS 903 with 20 mm nozzle complete with fixing clamps. Make: Essel/Priyanka/Newage

Code	Description	Unit	Quantity	Rate	Amount
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MR	Branch pipe short size with nozzle	each	1.00000	1900.00	1900.00
Total Cost of Materials					1900.0
1004	Fitter, Grade 1	Day	0.40000	447.00	178.80
1016	Mate	Day	0.40000	368.00	147.20

TOTAL		2226.0
Add CPOH @ 15%		333.90
cost for one each		2560.0
Say		2560.0
Cost index <b>31.06 %</b>		116.47
Total with Cost index		2676.48
Say		2676.48

6 Specification Code: od18647/2019\_2020

od18647/2019  
\_2020 : Above Ground Piping :- Providing, fixing, welding joints and testing of 80 mm Dia. heavy class MS ERW Black pipes as per relevant IS 1239/3589 with special accessories tees, elbows, flanged joints, rubber insertion, nuts, bolts, washers or welded joint with flange joints on bends, including fixing the pipe with suitable flat iron strip clamps/brackets structural members dash fastener, civil breakage, making good the same etc. painting with a primer coat and two coats of postal red enamel etc. complete as required. (for wet riser system)

Code	Description	Unit	Quantity	Rate	Amount
MR	Providing and fabricating 80 mm Dia. pipes including painting with primer and synthetic enamel	metre	10.0000 0	442.50	4425.00
MR	Cost of necessary brackets, supports, saddles, clamps, hangers, vibration-isolator's and fittings such as bends, tees etc. @15%	L.S	1.00000	663.75	663.75
MR	Cartage 5%	L.S	1.00000	221.25	221.25

MR2168	Welding rod	each	41.0000 0	2.19	89.79
	Add Cartage@1.00				0.90
	total				90.69
MR2122	Red oxide primer	Litre	1.00000	93.22	93.22
	Add Cartage@1.00				0.93
	total				94.15
MR2218	Synthetic enamel paint	Litre	1.00000	178.81	178.81
	Add Cartage@1.00				1.79
	total				180.60
MR	Other miscellaneous tools	L.S	1.00000	59.00	59.00
Total Cost of Materials					5734.44
1004	Fitter, Grade 1	Day	1.50000	447.00	670.50
1087	Welder	Day	1.50000	447.00	670.50
1016	Mate	Day	2.75000	368.00	1012.00
1006	Painter	Day	1.25000	407.00	508.75

<b>PRICE</b>	<b>TOTAL</b>	8596.19
	Add CPOH @ 15%	1289.43
	cost for 10.0 metre	9885.62
	cost for one metre	989.0
	Say	989.0
	Cost index <b>31.06 %</b>	102.50
	Total with Cost index	1091.50
	Say	1091.50

7 Specification Code: od19558/2019\_2020

od19558/2019 Supply, installing, testing and commissioning of Fire Extinguisher dry chemical

\_2020 : powder type ISI mark, 5 kg capacity with initial charger and installation brackets. Make - Safex / Warrior / Intime

Code	Description	Unit	Quantity	Rate	Amount
MR2379	Fire Extinguisher-DCP 5 Kg Type	each	1.00000	1695.00	1695.00
	Add Cartage@1.00				16.95
	Add necessary specials@5.00				84.75
	total				1796.70
Total Cost of Materials					1796.7
1004	Fitter, Grade 1	Day	0.20000	447.00	89.40
TOTAL					1886.1
Add CPOH @ 15%					282.92
cost for one each					2169.0
Say					2169.0
Cost index <b>31.06 %</b>					31.99
Total with Cost index					2200.99
Say					2200.99

8 Specification Code: od18658/2019\_2020

od18658/2019  
\_2020 : ESCAPE ROUTE SIGNS :- Supply & installing in position self glowing " EXIT " sign board to guide the occupants towards the exits of size 100mm x 300 mm made of luminescent safely, rigid sheet in green colour, photo luminescent rigid sheet with two each hanging chains & necessary supports to hang it on ceiling.

Code	Description	Unit	Quantity	Rate	Amount
MR	Providing and fixing Escape Route EXIT Signage	each	1.00000	531.00	531.00
Total Cost of Materials					531.0

1004	Fitter, Grade 1	Day	0.20000	447.00	89.40
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TOTAL					620.4
Add CPOH @ 15%					93.06
cost for one each					713.0
Say					713.0
Cost index <b>31.06 %</b>					31.68
Total with Cost index					744.68
Say					744.68

9 Specification Code: od18663/2019\_2020

FIRE EXIT :- Supply & installing in position self glowing " FIRE EXIT " sign board od18663/2019 of size 100mm x 300 mm made of luminescent safely, rigid sheet in green colour, \_2020 : photo luminescent rigid sheet with two each hanging chains & necessary supports to hang it on ceiling.

Code	Description	Unit	Quantity	Rate	Amount
MR	Providing and fixing FIRE EXIT Signage	each	1.00000	354.00	354.00
Total Cost of Materials					354.0
1004	Fitter, Grade 1	Day	0.20000	447.00	89.40
TOTAL					443.4
Add CPOH @ 15%					66.51
cost for one each					510.0
Say					510.0
Cost index <b>31.06 %</b>					31.99
Total with Cost index					541.99
Say					541.99

10 Specification Code: od18666/2019\_2020



od18666/2019  
\_2020 : 3 core cable,2.5sq mm,copper. Make:- ISI approved

Code	Description	Unit	Quantity	Rate	Amount
MR889	2.5 sqmm 3 core PVC / XLPE insulated armoured control cables with copper conductors for working voltages up to and including 1100 V conforming to IS 1554 part I 1988 for PVC and IS 7098 Part I for XLPE	metre	1.00000	121.19	121.19
Total Cost of Materials					121.19
1001	Wireman	Day	0.16000	447.00	71.52
1007	Khallas	Day	0.16000	368.00	58.88
TOTAL					251.59
Add CPOH @ 15%					37.74
cost for one metre					289.0
Other Engineering Organisations Say					289.0
Cost index 31.06 %					46.59
Total with Cost index					335.59
Say					335.59

11 Specification Code: od18670/2019\_2020

od18670/2019  
\_2020 : Providing and fixing Two Way Fire Brigade Inlet to Hydrant outside the Building (Butterfly valve and non-return valve to be paid separately) complete in all respects : Make:- ISI Approved.

Code	Description	Unit	Quantity	Rate	Amount
MR2355	Fire Brigade Inlet -2Way	each	1.00000	7203.00	7203.00
	Add Cartage@1.00				72.03
	Add necessary specials@5.00				360.15

		total			7635.18
Total Cost of Materials					7635.18
1005	Fitter, Grade 2	Day	1.00000	407.00	407.00
1087	Welder	Day	1.00000	447.00	447.00

TOTAL					8489.18
Add CPOH @ 15%					1273.38
cost for one no					9763.0
Say					9763.0
Cost index <b>31.06 %</b>					305.32
Total with Cost index					10068.32
Say					10068.32

12 Specification Code: od18674/2019\_2020

od18674/2019  
\_2020 : Downcomer panel with starter panel for terrace pump. Make: IS Approved

Code	Description	Unit	Quantity	Rate	Amount
MR1981	Three Phase DOL starters for 0.25 to 7.5 HP motor	each	1.00000	1355.93	1355.93
	Add Cartage@1.00				13.56
	total				1369.49
Total Cost of Materials					1369.49
1001	Wireman	Day	1.00000	447.00	447.00
1007	Khallas	Day	1.00000	368.00	368.00
TOTAL					2184.49
Add CPOH @ 15%					327.67
cost for one no					2512.0
Say					2512.0

Cost index <b>31.06 %</b>	291.03
Total with Cost index	2803.03
Say	2803.03

13 Specification Code: od19559/2019\_2020

od19559/2019  
\_2020 :

FIRE PUMPS (terrace pump) : - "Supplying, installing, testing & commissioning of electric driven pressurization pump (terrace pump) suitable for automatic operation and consisting of following: complete in all respect as required :<br>"Horizontal type, multistage, centrifugal pump of cast iron body & bronze impeller with<br>stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 kg/sq.cm. at highest and<br>farthest outlet at specified flow of 900 lpm. Make :- ISI kirloskar (KDS 520)/ IS Approved

Code	Description	Unit	Quantity	Rate	Amount
MR2320	Terrace Pump 7.5HP	each	1.00000	40127.00	40127.00
	Add Cartage@1.00				401.27
	Add necessary specials@5.00				2006.35
	total				42534.62
Total Cost of Materials					42534.62
MR	Supplying testing and commissioning	no	1.00000	3000.00	3000.00
TOTAL					45534.62
Add CPOH @ 15%					6830.19
cost for one no					52365.0
Say					52365.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					52365.00
Say					52365.00

14 Specification Code: od19578/2019\_2020

od19578/2019  
\_2020 : Above Ground Piping :- Providing, fixing, welding joints and testing of 100 mm Dia. heavy class MS ERW Black pipes as per relevant IS 1239/3589 with special accessories tees, elbows, flanged joints, rubber insertion, nuts, bolts, washers or welded joint with flange joints on bends, including fixing the pipe with suitable flat iron strip clamps/brackets structural members dash fastener, civil breakage, making good the same etc. painting with a primer coat and two coats of postal red enamel etc. complete as required. (for wet riser system)

Code	Description	Unit	Quantity	Rate	Amount
MR	Providing and fabricating 100 mm Dia. pipes including painting with primer and synthetic enamel	metre	10.0000 0	550.00	5500.00
MR	Cost of necessary brackets, supports, saddles, clamps, hangers, vibration-isolator's and fittings such as bends, tees etc. @15%	L.S	1.00000	825.00	825.00
MR	Cartage 5%	L.S	1.00000	275.00	275.00
MR2168	Welding rod	each	36.0000 0	2.19	78.84
	Add Cartage@1.00				0.79
	total				79.63
MR2122	Red oxide primer	Litre	1.00000	93.22	93.22
	Add Cartage@1.00				0.93
	total				94.15
MR2218	Synthetic enamel paint	Litre	1.00000	178.81	178.81
	Add Cartage@1.00				1.79
	total				180.60
MR	Other miscellaneous tools	L.S	1.00000	50.00	50.00
Total Cost of Materials					7004.38
1004	Fitter, Grade 1	Day	2.00000	447.00	894.00

1087	Welder	Day	2.00000	447.00	894.00
1016	Mate	Day	3.00000	368.00	1104.00
1006	Painter	Day	1.25000	407.00	508.75

	TOTAL	10405.13
	Add CPOH @ 15%	1560.77
	cost for 10.0 metre	11965.90
	cost for one metre	1197.0
	Say	1197.0
	Cost index <b>31.06 %</b>	121.44
	Total with Cost index	1318.44
	Say	1318.44

15 Specification Code: od19582/2019\_2020

od19582/2019  
\_2020 :

Below Ground Piping:- Providing, fixing, welding joints and testing of 100 mm Dia. heavy class MS ERW Black pipes as per relevant IS 1239/3589 with special accessories tees, elbows, flanged joints, rubber insertion, nuts, bolts, washers or welded joint with flange joints on bends and other fitting etc, painting with one coat of anti-corrosive paint and two coats of epoxy paint and and wrapping with polymer corrosion protection tape confirming to IS 10221 with proper overlapping, trimming etc. complete as required . (for wet riser system)

Code	Description	Unit	Quantity	Rate	Amount
MR	Providing and fabricating 100 mm Dia. pipes including painting with primer and synthetic enamel	metre	10.0000 0	550.00	5500.00
MR	Cost of necessary brackets, supports, saddles, clamps, hangers, vibration-isolator's and fittings such as bends, tees etc. @15%	L.S	1.00000	825.00	825.00
MR	Cartage 5%	L.S	1.00000	275.00	275.00

MR	Welding rods	L.S	1.00000	78.40	78.40
MR	PYPKOTE	sqm	7.85000	267.00	2095.95
MR	Bitumen paint	Litre	3.00000	76.00	228.00
MR	Adhesive	L.S	1.00000	100.00	100.00
Total Cost of Materials					9102.35
1004	Fitter, Grade 1	Day	2.00000	447.00	894.00
1087	Welder	Day	3.25000	447.00	1452.75
1016	Mate	Day	2.00000	368.00	736.00
1006	Painter	Day	1.00000	407.00	407.00

TOTAL	12592.1
Add CPOH @ 15%	1888.81
cost for 10.0 metre	14480.91
cost for one metre	1448.0
Say	1448.0
Cost index <b>31.06 %</b>	124.55
Total with Cost index	1572.55
Say	1572.55

**16** Specification Code: od18688/2019\_2020

od18688/2019 Providing and fixing 100mm dia. Cast iron Non-Return Valve. Make:- ISI  
\_2020 : Approved.<br><br>

Code	Description	Unit	Quantity	Rate	Amount
3043	100 mm dia	each	1.00000	2294.25	2294.25
Total Cost of Materials					2294.25
1004	Fitter, Grade 1	Day	0.50000	447.00	223.50
TOTAL					2517.75

Add CPOH @ 15%	377.66
cost for one each	2895.0
Say	2895.0

Cost index <b>31.06 %</b>	899.19
Total with Cost index	3794.19
Say	3794.19

**17** Specification Code: od18692/2019\_2020

od18692/2019\_2020 : Providing & fixing pressure gauges of not less than 100mm dia dial of pressure range 0-10 kg/cmsq complete with shut off valve duly calibrated before installation. Make:- ISI Approved.<br>

Code	Description	Unit	Quantity	Rate	Amount
MR2357	Pressure Guage	each	1.00000	720.00	720.00
	Add Cartage@1.00				7.20
	total				727.20
Total Cost of Materials					727.2
1004	Fitter, Grade 1	Day	0.20000	447.00	89.40
TOTAL					816.6
Add CPOH @ 15%					122.49
cost for one each					939.0
Say					939.0
Cost index <b>31.06 %</b>					31.99
Total with Cost index					970.99
Say					970.99

**18** Specification Code: od18695/2019\_2020

od18695/2019  
\_2020 : Providing and fixing 25 mm dia. Air Releasing Valve. Make:- ISI Approved.

Code	Description	Unit	Quantity	Rate	Amount
MR2359	Air Release Valve	each	1.00000	1314.00	1314.00
Total Cost of Materials					1314.0
1004	Fitter, Grade 1	Day	0.10000	447.00	44.70
TOTAL					1358.7
Add CPOH @ 15%					203.81
cost for one each					1563.0
Say					1563.0
Cost index <b>31.06 %</b>					16.15
Total with Cost index					1579.15
Say					1579.15

Other Engineering Organisations

19 Specification Code: od18697/2019\_2020

od18697/2019  
\_2020 : Supplying, testing, installation & commissioning of pressure switches for Hydrant, and Standby, including necessary wiring up to control panel & other materials.<br>

Code	Description	Unit	Quantity	Rate	Amount
MR2358	Pressure Switch	each	1.00000	2458.00	2458.00
	Add Cartage@1.00				24.58
	total				2482.58
Total Cost of Materials					2482.58
1001	Wireman	Day	0.50000	447.00	223.50
1016	Mate	Day	0.50000	368.00	184.00
TOTAL					2890.08



Add CPOH @ 15%	433.51
cost for one each	3324.0
Say	3324.0

Cost index <b>31.06 %</b>	145.67
Total with Cost index	3469.67
Say	3469.67

**20** Specification Code: od18700/2019\_2020

od18700/2019 Providing and fixing 100 mm Dia. cast iron Butterfly valve of the following size  
\_2020 : complete with S.S. 304 disc, bolts, nuts, washers and neoprene gaskets as per specifications.<br>

Code	Description	Unit	Quantity	Rate	Amount
3027	100mm dia	each	1.00000	3465.00	3465.00
Total Cost of Materials					3465.0
1004	Fitter, Grade 1	Day	0.50000	447.00	223.50
1016	Mate	Day	0.50000	368.00	184.00
TOTAL					3872.5
Add CPOH @ 15%					580.88
cost for one each					4453.0
Say					4453.0
Cost index <b>31.06 %</b>					1383.10
Total with Cost index					5836.10
Say					5836.10

**21** Specification Code: od61527/2019\_2020

od61527/2019 Supply, Installation, Testing and commissioning of Over head tank (Structural

\_2020 : Steel) with necessary Accessories (Nuts,Bolt and Support.etc) , Approved Make/Materials :- ISI Approved Materials.

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply of Structural Steel (Sheets,Joist,Channels and Plate) with accessories	kg	3920.00 000	60.00	235200.00
	Add Wastage@5.00				11760.00
	total				246960.00
Total Cost of Materials					246960.0
MR	Fabrication primer coating, Painting, Erection Labour Charge	kg	3920.00 000	40.00	156800.00
MR	Sheet Bending Charges	kg	3920.00 000	30.00	117600.00
MR	Labour charge for Material Lifting	kg	10.0000 0	10.00	100.00
MR	Fibre Coating (3 Layer) inside over head tank, Material charge inclusive	per sqm	22.0000 0	2478.00	54516.00
TOTAL					575976.0
Add CPOH @ 15%					86396.40
cost for one no					662372.0
Say					662372.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					662372.00
Say					662372.00

SUMP TANK CIVIL WORKS

1 Specification Code: od18671/2019\_2020

**od18671/2019\_2020 :Supply and fixing double sealed Ductile Iron manhole covers of size 800x800 mm with**

**frames (Medium duty)**

FOR 1 ITEM

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply double sealed Ductile Iron manhole covers of size 800x800 mm with frames (Medium duty)	each	1.00000	12932.20	12932.20
0111	Carpenter Ist Class	Day	0.60000	487.00	292.20
0114	Beldar	Day	0.60000	368.00	220.80
<b>TOTAL</b>					<b>13445.20</b>
cost for one each					13445.20
	say				13445.20

	Add Water Charges @ 1.0%				<b>134.45</b>
	Add CPOH @ 15.0%				<b>2036.94</b>
	Cost index <b>31.06 %</b>				185.07
	Total with Cost index				15801.67
	Say				15801.67

**MAIN BUILDING 1 HVAC SYSTEM**

1 Specification Code: od27253/2019\_2020

od27253/2019 Supply and installation of Refrigerant Copper piping insulated with Nitrile Rubber  
\_2020 : Tubular insulation with 13/19mm thickness.

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply of Refrigerant Copper piping insulated with Nitrile Rubber Tubular insulation with 13/19mm thickness.	metre	1.00000	1750.00	1750.00
<b>Total Cost of Materials</b>					<b>1750.0</b>

MR	installation of Refrigerant Copper piping insulated with Nitrile Rubber Tubular insulation with 13/19mm thickness.Make:- ISI Approved	metre	1.00000	40.00	40.00
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TOTAL		1790.0
Add CPOH @ 15%		268.50
cost for one metre		2059.0
Say		2059.0
Cost index <b>31.06 %</b>		.00
Total with Cost index		2059.00
Say		2059.00

2 Specification Code: od18631/2019\_2020

od18631/2019  
\_2020 : Supply, installation , testing and commissioning of exhaust fans of size up to 8 Inch(Round type) in the existing opening, fixing necessary anchor bolts / bolt and nuts etc., as required including giving connections with the supplied wire along with the exhaust fan.<br>300/305 mm sweep Light Duty Exhaust fan in metal frame working on 230 V A/C

Code	Description	Unit	Quantity	Rate	Amount
2860	6 mm dia rivet/ stud/ bolts and nuts	each	4.00000	3.00	12.00
	Add Cartage@1.00				0.12
	total				12.12
MR	Supply of 8 Inch Round Type Exhaust Fan(600 to 800 CFM) For Toilet Ventilation (Ductable) an,Make :- Havells/Luker/Viyani Fans/ISI Approved	no	1.00000	3046.00	3046.00
	Add Cartage@1.00				30.46
	total				3076.46
Total Cost of Materials					3088.58

1001	Wireman	Day	0.33000	447.00	147.51
MR719	Wireman Helper	Day	0.33000	600.00	198.00

TOTAL		3434.09
Add CPOH @ 15%		515.11
cost for one no		3949.0
Say		3949.0
Cost index <b>31.06 %</b>		56.84
Total with Cost index		4005.84
Say		4005.84

3 Specification Code: od27254/2019\_2020

Supply ,installation,testing and commissioning of Modular type outdoor units equipped with minimum 2 Nos of highly efficient DC twin Rotary compressors with od27254/2019 all inverter type compressor(s) only,special acryl pre-coated heat exchanger,low noise condenser fan,auto check function for connection error,auto address setting,with multiple outdoor units of capacities and quantities as mentioned below.Refrigerant Should be R410A .(4-6 HP)

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply of Modular type outdoor units equipped with minimum 2 Nos of highly efficient DC twin Rotary compressors with all inverter type compressor(s) only,special acryl precoated heat exchanger,low noise condenser fan,auto check function for connection error,auto address setting,with multiple outdoor units of capacities and quantities as mentioned below.Refrigerant Should be R410A .(4-6 HP) Make :- Carrier / ISI Equivalent.	each	1.00000	140646.00	140646.00

Total Cost of Materials					140646.0
MR	Installation, Testing and Commissioning of Modular type outdoor units equipped with minimum 2 Nos of highly efficient DC twin Rotary compressors with all inverter type compressor(s) only, special acryl precoated heat exchanger, low noise condenser fan, auto check function for connection error, auto address setting, with multiple outdoor units of capacities and quantities as mentioned below. Refrigerant Should be R410A .(4-6 HP) Make :- Carrier / ISI Equivalent.	each	1.00000	8200.00	8200.00

TOTAL		148846.0
Add CPOH @ 15%		22326.90
cost for one each		171173.0
Say		171173.0
Cost index <b>31.06 %</b>		.00
Total with Cost index		171173.00
Say		171173.00

4 Specification Code: od27257/2019\_2020

od27257/2019  
\_2020 : Supply, installation, testing and commissioning of High-Wall indoor units with compact cooling coil, electronic expansion valve and multi speed fan motor, The blower shall be dynamically balanced and designed for silent operation, the filters shall be washable type. Drain Pump is a part of the indoor unit. (2 TR), Make :- Carrier / ISI Equivalent.

Code	Description	Unit	Quantity	Rate	Amount
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MR	Supply of 4 way High-Wall units with compact cooling coil,electronic expansion valve and multi speed fan motor,The blower shall be dynamicaly balanced and designed for silent operation ,the filters shall be washable type .Drain Pump is a part of the indoor unit.(2 TR),Make :- Carrier / ISI Equivalent.	each	1.00000	33587.0 0	33587.00
Total Cost of Materials					33587.0
MR	Installation and commissioning of CASSETTE unit (2 TR)	each	1.00000	3300.00	3300.00

TOTAL		36887.0
Add CPOH @ 15%		5533.05
cost for one each		42420.0
Say		42420.0
Cost index <b>31.06 %</b>		.00
Total with Cost index		42420.00
Say		42420.00

5 Specification Code: od27259/2019\_2020

od27259/2019\_2020 : Supplying & providing 2.00 TR Split A/C with high wall mounted unit.<br>Carrier/Hitachi/Voltas/Blue Star.Mini 5Star rating ( Drain piping and Installation included).

Code	Description	Unit	Quantity	Rate	Amount
MR	Supplying & providing 2.00 TR Split A/C with high wall mounted unit. Carrier/Hitachi/Voltas/Blue Star.[Mini 5 Star rating]Copper Condensor Only.	each	1.00000	48960.0 0	48960.00
TOTAL					48960.0

Add CPOH @ 15%	7344.00
cost for one each	56304.0
Say	56304.0

Cost index <b>31.06 %</b>	.00
Total with Cost index	56304.00
Say	56304.00

MAIN BUILDING FURNITURE
1 Specification Code: od18616/2019_2020

od18616/2019\_2020 :Supply, deliver and place trademark registered branded (JALARAM make JED 1512) or approved equivalent Executive Desk with side unit and credenza. Desktop mounted on SS tubular legs and specially designed pedestal storage with utility spaces inspired by your needs. Size: (A) Main Desk : W-2000 x D-900 x H-750 mm (B) Side Unit : W-1050 x D-500 x H-750mm (C) Credenza : W-2000 x D-400 x H-1190mm  
Rate for each

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply, deliver and place JALARAM make JED 1512 or approved equivalent Executive Desk with side unit and credenza	each	1.00000	156579.50	156579.50
TOTAL					156579.50
cost for one each					156579.50
	say				156579.50

Add Water Charges @ 1.0%				<b>1565.79</b>
Add CPOH @ 15.0%				<b>23721.79</b>
Cost index <b>31.06 %</b>				0.00
Total with Cost index				181867.09
Say				181867.09



2 Specification Code: od18619/2019\_2020

od18619/2019\_2020 :Supply, deliver and place registered branded (JALARAM Make-JEC 2017(D)) or approved equivalent Executive High Back Revolving Chair, Tested by approved BIFMA standard laboratories confirming to ANSI/BIFMA X 5.1- 2002 Cl. No. 5,7,8,12,13,17 on functional requirement. Leatherette Finish, High quality mould foam cushion, Die-Cast Aluminium with buffing pedestal, 5 Position locking system with swivel mechanism, Chrome Finished Armrest, Anti-Shock and Synchro Tilt Mechanism , Adjustable cozy armrest , Overall Size (approx) :-H: 117.0 - 126.5 x W:75 x D:75 (cm) ,Seat Height:- 44-54 (cm) Front Pivot Synchro Mechanism: This mechanism helps you experience the effect of your body angle opening out, for maximum relaxation, while your feet remain firmly on the ground. 5-Position Locking: The backrest can be locked in 5 different positions, giving you firm support for concentrated work. Its anti-shock mechanism prevents the backrest from impacting the user when the lock is released. Moulded Foam: The seat and the backrest are made up of moulded polyurethane foam of the right density and thickness, which not only gives you a soft feeling on first contact but also provides a firm support to ensure hours of comfortable seating, Swivel Mechanism: The swivel mechanism allows for a complete 3600 lateral movement. This prevents you from straining over your shoulders and back to reach out for papers and phones kept on either side of your table, ensuring mobility while working. Twin Wheel Castors: The twin wheel castors facilitates ease of movement.

Rate for each

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply, deliver and place JALARAM Make-JEC 2017(D) or approved equivalent Executive High Back Revolving Chair	each	1.00000	20652.54	20652.54
TOTAL					20652.54
cost for one each					20652.54
	say				20652.54

	Add Water Charges @ 1.0%				<b>206.52</b>
	Add CPOH @ 15.0%				<b>3128.85</b>
	Cost index <b>31.06 %</b>				0.00
	Total with Cost index				23987.93
	Say				23987.93

3 Specification Code: od18623/2019\_2020

od18623/2019\_2020 :Supply, deliver and place registered branded (JALARAM Make-JEC 2017(F)) or approved equivalent Executive Visitor Chair, Tested by approved BIFMA standard laboratories confirming to ANSI/BIFMA X 5.1- 2002 Cl. No. 5,7,8,12,13,17 on functional requirement. With Leatherette Finish Moulded Foam: The seat and the backrest are made up of moulded polyurethane foam of the right density and thickness.

Rate for each

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply, deliver and place JALARAM Make-JEC 2017(F) or approved equivalent Executive Visitor Chair	each	1.00000	15065.60	15065.60
				<b>TOTAL</b>	<b>15065.60</b>
				cost for one each	15065.60
	say				15065.60

	Add Water Charges @ 1.0%				<b>150.65</b>
	Add CPOH @ 15.0%				<b>2282.43</b>
	Cost index <b>31.06 %</b>				0.00
	Total with Cost index				17498.69
	Say				17498.69

4 Specification Code: od18628/2019\_2020

od18628/2019\_2020 :Supply, deliver and place trademark registered branded (JALARAM make- JSF 102 A) or approved equivalent JALARAM Multipurpose storage cabinet with 2 adjustable shelves and 1 full locker. Overall size: H-1980 x W-915 x D-485(mm) (H-78"xW-36"x D-19") Material Specifications: The raw material used in cupboard will be PRIME quality CRCA as per IS 513 (1994,1998) 'D' grade. OEM must enclose Proof of purchase of steel from SAIL/Tata Steel/Essar/ Jindal. The cupboard should have welded construction with MIG welding process. The material used for constructing the cupboard should be prime quality Cold Rolled Close Annealed (CRCA) Steel (for doors and shelves 1.0 mm & other parts as per functional requirements)

The doors provided will be full height steel hinged doors The handle provided will be matching, easy to grip, sleek and elegant. The Cupboard will have a 3 way locking Mechanism Minimum 6 levers (With duplicate keys) mechanism with shooting bolt arrangement. Shelving: The shelving will be Height wise Adjustable and Shelf Mounting. The Uniformly Distributed Load (UDL) Capacity per each full shelf will be 40 Kg at least. The cupboard will have 2 numbers of adjustable and 1 fixed full shelves with 1 full locker. All steel parts will be epoxy polyester powder coated to the thickness not less than 50 microns finish after 10 tank anti-rust.  
Rate for each

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply, deliver and place JALARAM make- JSF 102 A) JALARAM or approved equivalent Multipurpose storage cabinet with 2 adjustable shelves and 1 full locker.	each	1.00000	15015.00	15015.00
TOTAL					15015.00
cost for one each					15015.00
	say				15015.00

	Add Water Charges @ 1.0%				<b>150.15</b>
	Add CPOH @ 15.0%				<b>2274.77</b>
	Cost index <b>31.06 %</b>				0.00
	Total with Cost index				17439.92
	Say				17439.92

5 Specification Code: od18632/2019\_2020

od18632/2019\_2020 :Supply, deliver and place Trademark registered branded (JALARAM make-JED 200) or approved equivalent Chief Executive Suite with PU coated 36 mm post formed top, Executive Return Unit & 3 Drawer Pedestal Unit,Size of the main Table: W-250 x D-110 x H-75 cm, Size of the Pedestal for Main Table: W-42.5 x D-80 cm, Size of Return Unit: W-127.5 x D-58 cm ,Size of the Pedestal for Return Unit: W-42.5xD-58 cm

Rate for each

Code	Description	Unit	Quantity	Rate	Amount
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MR	Supply, deliver and place JALARAM make-JED 200) or approved equivalent Chief Executive Suite.	each	1.00000	124743.20	124743.20
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				TOTAL	124743.20
				cost for one each	124743.20
	say				124743.20

	Add Water Charges @ 1.0%				1247.43
	Add CPOH @ 15.0%				18898.59
	Cost index 31.06 %				0.00
	Total with Cost index				144889.23
	Say				144889.23

6 Specification Code: od18636/2019\_2020

### Other Engineering Organisations

**od18636/2019\_2020 :Supply, deliver and place registered branded (JALARAM make JED 220) or approved equivalent Executive Desk elegant looking main desk with mobile pedestal and return unit. A real beauty of the blend of wood and steel. Main Desk Size: W-180 x D-90 x H-75 (cm) Joining Top (Black Finish) Size: W-105 x D-120 (cm) Fixed Side Return Desk Size :W-120 x D-60 x H-72(cm) Mobile Pedestal Size: W-40.5 x D-57 x H-50(cm).**

Rate for each

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply, deliver and place JALARAM make JED 220) or approved equivalent Executive Desk elegant looking main desk with mobile pedestal and return unit5 compartments.	each	1.00000	63332.20	63332.20
				TOTAL	63332.20
				cost for one each	63332.20
	say				63332.20

	Add Water Charges @ 1.0%				633.32
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	Add CPOH @ 15.0%				<b>9594.82</b>
	Cost index <b>31.06 %</b>				0.00
	Total with Cost index				73560.35
	Say				73560.35

7 Specification Code: od18644/2019\_2020

od18644/2019\_2020 :Supply, deliver and place Trademark registered branded (JALARAM Make-JSS 908) or approved equivalent Sofa Set Overall Size of 3 seater: H-762 x W-2134 x D-812 mm

Rate for each

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply, deliver and place JALARAM Make-JSS 908 or approved equivalent Sofa Set	each	1.00000	37915.25	37915.25
Other Engineering Organisations TOTAL					37915.25
cost for one each					37915.25
	say				37915.25

	Add Water Charges @ 1.0%				<b>379.15</b>
	Add CPOH @ 15.0%				<b>5744.16</b>
	Cost index <b>31.06 %</b>				-0.01
	Total with Cost index				44038.56
	Say				44038.56

8 Specification Code: od18652/2019\_2020

od18652/2019\_2020 :Supply, deliver and place Trademark registered branded (JALARAM make-JED 204 (A)) or approved equivalent Executive table, both side storage unit of special size. 2 drawers cum filing drawer & a center drawer, mounted on telescopic channel. Overall Size of curvica top: W-180 × D-90 cm ,Height of table 72.5 (cm) Material Specification: Two pedestals having 2 box drawers and 1 filing drawer with independent locking arrangement (cam lock) for each pedestal. Drawers shall have a clear depth of > 400 mm. One center drawer having ~ 350 mm clear depth with independent locking arrangement. The top should be made of 25 mm thick Pre&dash; laminated board(PLB) of TESA with 2 mm thick matching lipping. Under Structure: Two pedestals shall be a combination of processed wood (PLB) and Mild Steel (MS). Pedestal shell to be 0.80 mm thick MS sheet. Drawer tray to be made from 0.6 mm thick M.S sheet. Drawer separator to be made from 0.6 mm thick M.S. sheet. PLB drawer fronts (18 mm thick PLB) to match the top colour. Drawers to be mounted on double extension steel telescopic ball slides to give full access to the drawer. Sleek handles for easy grip. Glides screws for leveling.Stiffeners (1.6 mm thick) is to be provided under the top to give additional strength. Powder coating: Powder coating on all items with dry film thickness not less than 50 microns, Salt Spray test to withstand more than 1000 hours, Pencil scratch hardness more than 2H, Adhesion as per DIN 53152 Standards. The powder coating shall be of good quality (7 process) to ensure good adhesion of life of the coating. Modesty: Shall be made from 1.0 mm thick MS. Panel recessed inside for more leg room. Panel to be styled with cut&dash;outs (windows) for better physical appearance.

Rate for each

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply, deliver and place JALARAM make-JED 204 (A) or approved equivalent Executive table	each	1.00000	21713.56	21713.56
TOTAL					21713.56
cost for one each					21713.56
	say				21713.56

	Add Water Charges @ 1.0%				217.13
	Add CPOH @ 15.0%				3289.60
	Cost index 31.06 %				0.00
	Total with Cost index				25220.30
	Say				25220.30

9 Specification Code: od18655/2019\_2020

od18655/2019\_2020 :Supply, deliver and place registered branded (JALARAM make JSF 115(6) E) or approved equivalent slotted angle rack (Open type) Overall size: H-78" X W-36" X D-18" Angle: 40 x 40 x 2 mm (4 nos.) Shelves: 36" x 18" (22 swg. 6 nos.) Corner plate: 8 nos. Nuts & bolts: 64 nos. Shoes: 4 nos. The raw material used will be PRIME quality CRCA as per IS 513 (1994,1998) 'D' grade. OEM must enclose Proof of purchase of steel from SAIL/Tata Steel/Essar/ Jindal. Finishing: All steel parts will be epoxy polyester powder coated to the thickness not less than 50 microns finish after 10 tank anti-rust treatment and B grade phosphating  
Rate for each

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply, deliver and place JALARAM make JSF 115(6) E or approved equivalent slotted angle rack	each	1.00000	4274.57	4274.57
TOTAL					4274.57
cost for one each					4274.57
	say				4274.57

	Add Water Charges @ 1.0%				42.74
	Add CPOH @ 15.0%				647.59
	Cost index 31.06 %				0.00
	Total with Cost index				4964.91
	Say				4964.91

10 Specification Code: od18662/2019\_2020

od18662/2019\_2020 :Supply, deliver and place of Trademark registered branded (JALARAM make- JMPT 4A) or approved equivalent Table for with 25 mm top, square tubular frame. Overall size: W-151 x D-90 x H-75(cm) Material Description: Main top 25mm thick wood based high quality Pre-laminated Particle Board(PLB) of TESA with 2mm PVC edge band by hot melt glue process for beading all over edge. Top frame of 1.21mm thick. (18swg) CRAC sheet IS 513. Table frame structure made up of prime quality MS ERW square tube 25x25mm of 18swg. Good quality PVC Shoes. All steel parts should be epoxy polyester powder coated to the thickness not less than 50 microns finish after 10 tank anti-rust treatment and B grade phosphating.  
Rate for each

Code	Description	Unit	Quantity	Rate	Amount
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MR	Supply, deliver and place of JALARAM or approved equivalent make table model JMPT 4A	each	1.00000	7093.90	7093.90
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TOTAL					7093.90
cost for one each					7093.90
	say				7093.90

	Add Water Charges @ 1.0%				<b>70.93</b>
	Add CPOH @ 15.0%				<b>1074.72</b>
	Cost index <b>31.06 %</b>				0.00
	Total with Cost index				8239.56
	Say				8239.56

11 Specification Code: od18665/2019\_2020

od18665/2019\_2020 :Supply,deliver and place Trademark registered branded (JALARAM Make JEC 501(C))/Equivalent Executive Visitor Net Chair, <br>Overall Size (approx): H-98 x W-58 x D-63.5 (cm) <br>Seat Height: 48 (cm) <br>Frame structure: Backrest made of Mesh and Seat from hot mould plywood of minimum 12 mm thickness of ergonomic design to avoid back pain. Chrome-plated Arm & Frame 'Tapestry: Minimum average weight required 400 to 490 gms per sq. mtr. <br>Tapestry will be tested quality such as stain test, ultra violet test,glue test <br>and color fastening with average weight of 450 grams per square meter <br>Cushioning: PU foam having density of 50 kgs/m3 for seat. Average <br>thickness of foam not less than 50 mm + 10 mm Polly foam. <br>Arm rest material: Polyurethane on Chrome <br>Shoes: Nylon Rubber

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply,deliver and place	each	1.00000	11204.23	11204.23
TOTAL					11204.23
cost for one each					11204.23
	say				11204.23

	Add Water Charges @ 1.0%				<b>112.04</b>
	Add CPOH @ 15.0%				<b>1697.44</b>
	Cost index <b>31.06 %</b>				-0.01



	Total with Cost index				13013.71
	Say				13013.71

12 Specification Code: od18669/2019\_2020

od18669/2019\_2020 :Supply deliver and place Trademark registered branded (JALARAM Make-JSD 601(D))/equivalent Two Seater Desk Cum Bench fitted on tubular frame with perforated seat and back for Senior Students.<br>Overall size : H-760 × W-1040 × D-1000 (mm) <br>Seat Height: 460 mm Desk Top (Curvica) of 25 mm thick wood based high quality branded (TESA) post formed Pre-laminated Particle Board (PLB )with 0.6mm laminated with 2mm PVC beading by hot melt glue<br>process all over 4 edges. <br>Bench Main frame tube & Support tube of 32mm, 16swg ERW round tube. <br>Seat & Back frame tube of 19mm, 16swg ERW round tube. <br>Seat & Back support of 25x25x1.6mm (16swg) thick. square ERW tube. <br>Seat & Back of 18swg. Perforated CRCA sheet IS 513. <br>Storage Bucket of 18swg. Perforated CRCA sheet IS 513. <br>Good quality PVC shoes & cap. All steel parts will be epoxy polyester powder coated to the thickness not less than 50 microns finish after 10 tank anti-rust treatment and B grade phosphating.

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply delever and place	each	1.00000	7693.20	7693.20
TOTAL					7693.20
cost for one each					7693.20
	say				7693.20

	Add Water Charges @ 1.0%				<b>76.93</b>
	Add CPOH @ 15.0%				<b>1165.51</b>
	Cost index <b>31.06 %</b>				0.00
	Total with Cost index				8935.65
	Say				8935.65

13 Specification Code: od18673/2019\_2020

od18673/2019\_2020 :Supply and install Jasos brand JC-S 03 Model or approved equivalent auditorium seating chair comprise of seat and back frames made with CR pipes, Back cover with PPCP tray, Up holstory PU molded form of density 52-58 kg/m3, Mechanisms as legs made of CR pipes with PU cup holder arm rest,push back mechanism - box and Nylon cast metal rollers, with spring, height of chair 97cm - 100cm @52cm centre to centre, 90x8mm with chemical bonding method, All seat and back frames with enamel painting, Legs - powder coated, Mechanism- Laqor paint finished.

Rate of each seat

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply Jasos brand JC-S 03 Model auditorium seating chair	each	1.00000	4000.00	4000.00
9988	Carriage and sundries	L.S	27.28000	1.73	47.19
0116	Fitter(grade1)	Day	0.10000	487.00	48.70
0115	Coolie	Day	0.10000	368.00	36.80
TOTAL					4132.69
cost for one each					4132.69
	say				4132.69

	Add Water Charges @ 1.0%				41.32
	Add CPOH @ 15.0%				626.10
	Cost index 31.06 %				47.86
	Total with Cost index				4847.99
	Say				4847.99

14 Specification Code: od18677/2019\_2020

od18677/2019\_2020 :Supply deliver and place trademark registered branded (JALARAM make JMDX 70) OR Equivalent Library reading cubical with top partition (Double side main unit + Add on unit) <br>Overall size: 1800W x 1200D x 760H mm <br>Top partition: 1750W x 18D x 250H mm <br>Material Description: <br>• Main top of 18mm thick. Wood based high quality Pre-laminated particle board (PLB) of TESA with 2 mm PVC beading all over <br>edges. <br>• Top partition & side partition of 18mm thick. Pre-laminated particle board (PLB) of TESA with 0.5mm PVC beading all over edges fitted with U bracket. <br>• Vertical pillar of 1.2mm thick. (18swg) CRCA sheet IS 513. <br>• Cable cover of 0.9mm thick. (20swg) CRCA sheet IS 513. <br>• Leg frame & footrest of 50x25x1.2mm thick. (18swg) ERW rectangular MS tube (CRC). <br>• Good quality adjustable stud . <br>• All steel parts should be epoxy polyester powder coated to the thickness not less

than 50 microns finish after 10 tank anti-rust treatment and B grade phosphating (in house) & same will be demonstrated to the purchaser during pre-dispatch Inspection.

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply deliver and place	each	1.00000	21377.10	21377.10
TOTAL					21377.10
cost for one each					21377.10
	say				21377.10

	Add Water Charges @ 1.0%				<b>213.77</b>
	Add CPOH @ 15.0%				<b>3238.63</b>
	Cost index <b>31.06 %</b>				0.00
	Total with Cost index				24829.50
	Say				24829.50

Other Engineering Organisations

15 Specification Code: od18682/2019\_2020

od18682/2019\_2020 :Supply, deliver and place trademark registered branded (JALARAM make JSF 125(D)) OR Equivalent multipurpose expandable storage rack (Double Faced main Unit + Add on unit) in knock down design with 5 shelves making 6 compartments.<br>Overall size: H-1980 x W-915 x D-535 mm • All steel parts will be epoxy polyester powder coated to the thickness not less than 50 microns finish after 10 tank anti-rust treatment and B grade phosphating (in house) & same will be demonstrated to the purchaser during pre-dispatch Inspection.

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply, deliver and place	each	1.00000	28400.90	28400.90
TOTAL					28400.90
cost for one each					28400.90
	say				28400.90

	Add Water Charges @ 1.0%				<b>284.00</b>
	Add CPOH @ 15.0%				<b>4302.73</b>
	Cost index <b>31.06 %</b>				0.00
	Total with Cost index				32987.65
	Say				32987.65

16 Specification Code: od18683/2019\_2020

od18683/2019\_2020 :Supply, deliver and place trademark registered branded (JALARAM make JSF 125(S)) OR Equivalent multipurpose expandable storage rack (Single faced main unit + Add on Unit) in knock down design with 5 shelves making 6 compartments. <br>Overall size: H-1980 x W-915 x D-380 mm <br>Material Specifications: <br>• All steel parts will be epoxy polyester powder coated to the thickness not less than 50 microns finish after 10 tank anti-rust treatment and B grade phosphating (in house) & same will be demonstrated to the purchaser during pre-dispatch Inspection.

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply, deliver and plac	each	1.00000	19256.60	19256.60
TOTAL					19256.60
cost for one each					19256.60
	say				19256.60

	Add Water Charges @ 1.0%				<b>192.56</b>
	Add CPOH @ 15.0%				<b>2917.37</b>
	Cost index <b>31.06 %</b>				-0.01
	Total with Cost index				22366.54
	Say				22366.54

17 Specification Code: od18687/2019\_2020

od18687/2019\_2020 :Supply, deliver and place trademark registered branded (JALARAM Make-JEC 325 (C)) or approved equivalent Executive Low Back Revolving Chair, Tested by approved BIFMA standard laboratories confirming to ANSI/BIFMAX 5.1- 2002 Cl. No. 5,7,8,12,13,17 on functional requirement, advanced synchro til mechanism, back rest height adjustment, 3-D wrap around design, tilt lock mechanism, self regulating tilt tension adjustment, seat depth adjustment, high quality moulded foam, pneumatic height adjustment. Overall Size (approx): H:87-104 x W:70 x D:70(cm) Seat height : 44 to 54 (cm) Frame structure: Seat & back from hot mould plywood of minimum 12 mm thickness of ergonomic design . Seat Height adjustment and ergonomics: With Pneumatic gas lift with 300 N force Stroke length of 12.5 cm. Seat height will be adjustable and optimum Height is 44-54 cm . Under structure facility: Revolving, Tilting and Lateral smooth movement on twin wheel castors fixed on five pronged wide base of 65 cm to 75 cm D. 'Tapestry Minimum average weight required 400 to 490 gms per sq. mtr. Tapestry : Tapestry should be tested quality such as stain test, ultra violet test, glue test and color fastening with average weight of 450 grams per square meter. (All the stitches of seat and back boarder should be covered by plastic beading of black cover for elegant look. Cushioning: PU foam having density of 40 kg for back and 50 kgs/m3 for seat. Average thickness of foam not less than 50 mm + 10 mm Polly foam. Base: Tested High quality virgin material. Arm rest material: single piece round soft virgin quality PU handle reinforced within built steel rib.

Rate for each

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply, deliver and place JALARAM Make-JEC 325 (C) or approved equivalent Executive Low Back Revolving Chair	each	1.00000	11485.08	11485.08
TOTAL					11485.08
cost for one each					11485.08
	say				11485.08

	Add Water Charges @ 1.0%				<b>114.85</b>
	Add CPOH @ 15.0%				<b>1739.98</b>
	Cost index <b>31.06 %</b>				0.00
	Total with Cost index				13339.92
	Say				13339.92

18 Specification Code: od18690/2019\_2020

od18690/2019\_2020 :Supply, deliver and place registered branded (JALARAM make-JDT-706 A) or approved equivalent canteen table for 6 persons Overall Size of the table:L-1600 x W-800 x H-750 mm Material Description: Main top of 30mm thick. Post formed MDF top with 0.6mm lamination & longer edges both side post forming (curvica) & other both side PVC edge band by hot melt glue process for beading with matching colour. Top frame of 25x25x1.2mm (18swg) SS 304 grade square tube. Main vertical legs of 60 to 65mm x 1.6mm (16swg) thick. SS 304 or SS 202 grade round tube. Leg support & Footrest of 30mm x 1.6mm (16swg) thick. SS 304 or SS 202 grade round table. Good quality PVC adjustable stud at table. All SS parts with glossy buffing.Trademark registered branded (JALARAM make) canteen chair. Overall Size of the chair: H-900mm Seat Dia:400mm Seat Height:450mm Material Description: Chair frame of OD-19mm x 16swg SS 304 grade pipe with glossy buffing. Back support of OD-12mm tube SS 304 grade with Glossy buffing. Seat top (400mm Round) of 19mm thick. Wooden (Rubber wood) with melamine coated. Good quality PVC shoes at bottom , All SS parts with glossy buffing.

Rate for each

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply, deliver and place (JALARAM make-JDT-706 A) or approved equivalent canteen table for 6 persons	each	1.00000	34734.74	34734.74
TOTAL					34734.74
Other Engineering Organisations cost for one each					34734.74
	say				34734.74

	Add Water Charges @ 1.0%				<b>347.34</b>
	Add CPOH @ 15.0%				<b>5262.31</b>
	Cost index <b>31.06 %</b>				0.00
	Total with Cost index				40344.40
	Say				40344.40

19 Specification Code: od18694/2019\_2020

od18694/2019\_2020 :Sypply and installation of Podium : 600x600x 1200mm ht.

FOR ONE ITEM

Code	Description	Unit	Quantity	Rate	Amount
MR	SUPPLY	each	1.00000	16949.15	16949.15
TOTAL					16949.15
cost for one each					16949.15
	say				16949.15

	Add Water Charges @ 1.0%				<b>169.49</b>
	Add CPOH @ 15.0%				<b>2567.79</b>
	Cost index <b>31.06 %</b>				0.00
	Total with Cost index				19686.44
	Say				19686.44

Other Engineering Organisations

MAIN BUILDING - ELV WORKS

1 Specification Code: od19121/2019\_2020

PRICE

Supply, installation, testing and commissioning of Bio Metric Finger Print scan od19121/2019 attendance system with LCD/LED display & keypad & TCPIP LAN, USB \_2020 : Connectivity along with Attendance monitoring & report software (Web based Terminal)

Code	Description	Unit	Quantity	Rate	Amount
MR	Bio Metric Finger Print scan attendance system with LCD/LED display & keypad & TCPIP LAN, USB Connectivity along with Attendance monitoring & report software (Web based Terminal)	no	1.00000	5750.00	5750.00
MR	Fixing Charges	no	1.00000	1850.00	1850.00
TOTAL					7600.0

cost for one no	7600.0
Say	7600.0

Cost index <b>31.06 %</b>	.00
Total with Cost index	7600.00
Say	7600.00

2 Specification Code: od19347/2019\_2020

od19347/2019 Supply, installation, testing and commissioning of Cat6 I/O for Patch Panel  
\_2020 : Shuttered.

Code	Description	Unit	Quantity	Rate	Amount
MR	Cat6 I/O for Patch Panel Shuttered.	no	1.00000	165.00	165.00
Total Cost of Materials					165.0
MR	Fixing Charges	no	1.00000	55.00	55.00
Other Engineering Organisations TOTAL					220.0
cost for one no					220.0
Say					220.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					220.00
Say					220.00

3 Specification Code: od19324/2019\_2020

od19324/2019 Supply Installation testing and Commissioning of 10/100/1000 Mbps 16 Port  
\_2020 : Network Switch to provide networks and internet on class room etc.

Code	Description	Unit	Quantity	Rate	Amount
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MR	10/100/1000 Mbps 16 Port Network Switch	no	1.00000	5500.00	5500.00
Total Cost of Materials					5500.0
MR	Fixing Charges	each	1.00000	750.00	750.00

TOTAL					6250.0
cost for one no					6250.0
Say					6250.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					6250.00
Say					6250.00

4 Specification Code: od19299/2019\_2020

od19299/2019 Supply, Installation, testing and commissioning of Cat6 24 Port un loaded Patch  
\_2020 : Panel.

Other Engineering Organisations

Code	Description	Unit	Quantity	Rate	Amount
MR	Cat6 24 Port un loaded Patch Panel.	no	1.00000	1350.00	1350.00
Total Cost of Materials					1350.0
MR	Labour charges per unit	no	1.00000	250.00	250.00
TOTAL					1600.0
cost for one no					1600.0
Say					1600.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					1600.00
Say					1600.00

5 Specification Code: od19362/2019\_2020

od19362/2019  
\_2020 : Supply and drawing of CAT6 4 pair cable including all necessary connector.

Code	Description	Unit	Quantity	Rate	Amount
MR	CAT6 4 pair cable including all necessary connector.	metre	1.00000	21.00	21.00
Total Cost of Materials					21.0
MR	Fixing Charges	metre	1.00000	18.00	18.00
TOTAL					39.0
cost for one metre					39.0
Say					39.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					39.00
Say					39.00

6 Specification Code: od19125/2019\_2020

od19125/2019  
\_2020 : Supply, installation, testing and commissioning of wall mounted 15Ux600Wx600D With Front Glass Door With Lock & Key, Side Openable Panels with Lock & Key, 6Way 5A PDU, 1U Cable Manager, Cooling Fan, H/W Kit10

Code	Description	Unit	Quantity	Rate	Amount
MR	wall mounted 15Ux600Wx600D With Front Glass Door With Lock & Key, Side Openable Panels with Lock & Key, 6Way 5A PDU, 1U Cable Manager, Cooling Fan, H/W Kit10	no	1.00000	7375.00	7375.00
Total Cost of Materials					7375.0
MR	Fixing Charges	no	1.00000	1250.00	1250.00
TOTAL					8625.0
cost for one no					8625.0

Say	8625.0
Cost index <b>31.06 %</b>	.00
Total with Cost index	8625.00
Say	8625.00

7 Specification Code: od19131/2019\_2020

Network Video Recorder: <br>Providing & fixing Network Video Recorder 32-channel 720P or 24-channel 1080P high definition network video input and od19131/2019 storage Support simultaneous HDMI and VGA output, resolution up to \_2020 : 1920x1080P/60Hz Supports 256Mbps bandwidth throughput handling, Supports 4-channe, 1080P video real-time decoding and synchronous playback Supports 8 SATA hard disk with capacity up to 4TB.

Code	Description	Unit	Quantity	Rate	Amount
MR	Network Video Recorder 32-channel 720P or 24-channel 1080P high definition network video input and storage Support simultaneous HDMI and VGA output, resolution up to 1920x1080P/60Hz Supports 256Mbps bandwidth throughput handling, Supports 4-channel, 1080P video real-time decoding and synchronous playback Supports 8 SATA hard disk with capacity up to 4TB.	no	1.00000	42450.00	42450.00
Total Cost of Materials					42450.0
MR	Fixing Charges	no	1.00000	7750.00	7750.00
TOTAL					50200.0
cost for one no					50200.0
Say					50200.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					50200.00

Say	50200.00
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8 Specification Code: od19145/2019\_2020

od19145/2019\_2020 : Supply, installation, testing and commissioning of Outdoor IR IP bullet camera 2 MP 2.1mm/4mm/6mm focal length lens capable to 1.0 lux sensitivity, with IR 480TV lines.

Code	Description	Unit	Quantity	Rate	Amount
MR	Outdoor IR IP bullet camera 2 MP 2.1mm/4mm/6mm focal length lens capable to 1.0 lux sensitivity, with IR 480TV lines.	no	1.00000	9850.00	9850.00
Total Cost of Materials					9850.0
MR	Fixing Charges	no	1.00000	413.00	413.00
TOTAL					10263.0
Other Engineering Organisations cost for one no					10263.0
Say					10263.0
Cost index 31.06 %					.00
Total with Cost index					10263.00
Say					10263.00

9 Specification Code: od19147/2019\_2020

od19147/2019\_2020 : Supply, installation, testing and commissioning of indoor IR IP dome camera 2 MP <br>2.1mm/4mm/6mm focal length lens capable to 1.0 lux sensitivity, with IR n 480 TV lines.

Code	Description	Unit	Quantity	Rate	Amount
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MR	Indoor IR IP dome camera 2 MP 2.1mm/4mm/6mm focal length lens capable to 1.0 lux sensitivity, with IR n 480 TV lines.	no	1.00000	5650.00	5650.00
Total Cost of Materials					5650.0
MR	Fixing Charges	no	1.00000	295.00	295.00

TOTAL					5945.0
cost for one no					5945.0
Say					5945.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					5945.00
Say					5945.00

**10** Specification Code: od19266/2019\_2020

od19266/2019 Supply & laying of twin twisted 2x1.5 sqmm Cu flexible wire 1.1 kv grade PVC  
\_2020 : insulated through PVC conduit.

Code	Description	Unit	Quantity	Rate	Amount
MR	2x1.5 sqmm Cu flexible wire 1.1 kv grade PVC insulated through PVC conduit	metre	1.00000	48.00	48.00
Total Cost of Materials					48.0
MR	Fixing Charges	no	1.00000	21.24	21.24
TOTAL					69.24
cost for one no					69.0
Say					69.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					69.00
Say					69.00

11 Specification Code: od19269/2019\_2020

od19269/2019  
\_2020 : Supply, Installation, Testing and commissioning of XLR cables and connectors

Code	Description	Unit	Quantity	Rate	Amount
MR	XLR cables and connectors	no	1.00000	1875.00	1875.00
Total Cost of Materials					1875.0
MR	Fixing Charges	no	1.00000	150.00	150.00
TOTAL					2025.0
cost for one no					2025.0
Say					2025.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					2025.00
Say					2025.00

12 Specification Code: od18661/2019\_2020

Supply, Installation, Testing and commissioning of Distribution box for PA od18661/2019 distribution made out of 16 SWG CRCA sheet with lockable door arrangement  
\_2020 : having connectors (10 NOS) suitable for 1.5sqmm wire with facility for cable termination of 4cx10 sqmm ALAR. Required at each floor for PA wire termination.

Code	Description	Unit	Quantity	Rate	Amount
MR	Distribution box for PA distribution made out of 16 SWG CRCA sheet with lockable door arrangement having connectors (10 NOS) suitable for 1.5sqmm wire with facility for cable termination of 4cx10 sqmm ALAR. Required at each floor for PA wire termination.	no	1.00000	684.40	684.40

Total Cost of Materials					684.4
MR	Labour charges per unit	no	1.00000	295.00	295.00

TOTAL					979.4
cost for one no					979.0
Say					979.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					979.00
Say					979.00

13 Specification Code: od18668/2019\_2020

SITC Of 350W RMS MIXER AMPLIFIER, 3 MIC, 2 AUX, 100V/70V AND 4OHMS , BALANCED MIC,FREQUENCY RESPONSE (50 HZ-16000HZ),S/N RATIO- od18668/2019 MIC1,2,3,4:66DB;AUX 1:80 DB,THD-LESS THAN 1% AT 1 KHZ,1/3 RATED  
 \_2020 : POWER, MUTING FUNCTION-MIC 1 OVERRIDES OTHER INPUT SIGNALS WITH 0-30 DB ATTENUATION,CONTROLS-INDIVIDUAL GAIN CONTROLS, POWER SWITCH;BASS: 10DB AT 100HZ,TREBLE: 10DB AT10000HZ.

Code	Description	Unit	Quantity	Rate	Amount
MR	350W RMS MIXER AMPLIFIER	no	1.00000	29942.50	29942.50
Total Cost of Materials					29942.5
MR	Labour charges per unit	no	1.00000	2950.00	2950.00
TOTAL					32892.5
cost for one no					32893.0
Say					32893.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					32893.00
Say					32893.00

14 Specification Code: od18672/2019\_2020

od18672/2019  
\_2020 : Supply, installation, testing and commissioning of Telephone socket.

Code	Description	Unit	Quantity	Rate	Amount
MR	Telephone socket	no	1.00000	171.70	171.70
Total Cost of Materials					171.7
MR	Labour charges per unit	no	1.00000	88.50	88.50
TOTAL					260.2
cost for one no					260.0
Say					260.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					260.00
Say					260.00

15 Specification Code: od19270/2019\_2020

od19270/2019 Supply, Installation, Testing & commissioning of Telephone of approved makes  
\_2020 : including all other accessories for connection.

Code	Description	Unit	Quantity	Rate	Amount
MR	Telephone of approved makes including all other accessories for connection.	no	1.00000	1080.00	1080.00
Total Cost of Materials					1080.0
MR	Labour charges per unit	no	1.00000	50.00	50.00
TOTAL					1130.0
cost for one no					1130.0
Say					1130.0



Cost index	<b>31.06 %</b>	.00
Total with Cost index		1130.00
	Say	1130.00

16 Specification Code: od18678/2019\_2020

od18678/2019  
\_2020 : Supply & Installation of telephone cable 10 pair through PVC conduit.

Code	Description	Unit	Quantity	Rate	Amount
MR	Telephone cable 10 pair through PVC conduit	metre	1.00000	54.28	54.28
Total Cost of Materials					54.28
MR	Labour charges per meter	metre	1.00000	23.60	23.60
TOTAL					77.88
Other Engineering Organisations cost for one metre					78.0
Say					78.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					78.00
Say					78.00

17 Specification Code: od18679/2019\_2020

od18679/2019  
\_2020 : Supply & Installation of UG telephone cable jelly filled, 10 pair

Code	Description	Unit	Quantity	Rate	Amount
MR	UG telephone cable jelly filled, 10 pair	metre	1.00000	115.05	115.05
Total Cost of Materials					115.05

MR	Labour charges per meter	metre	1.00000	29.50	29.50
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TOTAL					144.55
cost for one metre					145.0
Say					145.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					145.00
Say					145.00

**18** Specification Code: od18686/2019\_2020

od18686/2019 Supply, installation, testing and commissioning of 20 PAIR BOX WITH KRONE  
\_2020 : MODULES

Code	Description	Unit	Quantity	Rate	Amount
MR	20 PAIR BOX WITH KRONE MODULES	no	1.00000	855.50	855.50
Total Cost of Materials					855.5
MR	Fixing charges per unit	no	1.00000	531.00	531.00
TOTAL					1386.5
cost for one no					1387.0
Say					1387.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					1387.00
Say					1387.00

**19** Specification Code: od19271/2019\_2020

od19271/2019 Supply, installation, testing and commissioning of Telephone system: NEC Digital  
\_2020 : Key Telephone System Model-SL2100 32 Bit Micro Processor Configured as 08

P&T lines 48 Hybrid Ports EXPANDABLE MODEL UP TO 128 PCM/TDM 100 %  
Non-Blocking Inbuilt Conference,32 party Auto attendant (single channel) CLI  
based call routing AND ALL STANDARD FEATURES

Code	Description	Unit	Quantity	Rate	Amount
MR	NEC Digital Key Telephone System Model-SL2100 32 Bit Micro Processor Configured as 08 P&T lines 48 Hybrid Ports EXPANDABLE MODEL UP TO 128 PCM/TDM 100 % Non-Blocking Inbuilt Conference,32 party Auto attendant (single channel) CLI based call routing AND ALL STANDARD FEATURES	no	1.00000	194750. 00	194750.00
Total Cost of Materials					194750.0
MR	Labour charges per no	no	1.00000	5900.00	5900.00
TOTAL					200650.0
cost for one no					200650.0
Say					200650.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					200650.00
Say					200650.00

20 Specification Code: od18629/2019\_2020

od18629/2019  
\_2020 : Supply, installation, testing and commissioning of LAN socket.

Code	Description	Unit	Quantity	Rate	Amount
MR	LAN Socket	no	1.00000	194.70	194.70
Total Cost of Materials					194.7
MR	Fixing charges per unit	no	1.00000	64.90	64.90

TOTAL	259.6
cost for one no	260.0
Say	260.0

Cost index <b>31.06 %</b>	.00
Total with Cost index	260.00
Say	260.00

**21** Specification Code: od18633/2019\_2020

od18633/2019 Supply and installation of GI box for modular switch installation including base  
\_2020 : plate and front plate 1/2 M

Code	Description	Unit	Quantity	Rate	Amount
MR	GI box for modular switch installation including base plate and front plate 1/2 M	no	1.00000	56.64	56.64
MR	Installation charge per unit	no	1.00000	177.00	177.00
TOTAL					233.64
cost for one no					234.0
Say					234.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					234.00
Say					234.00

**22** Specification Code: od19273/2019\_2020

od19273/2019 Supply, installation, testing and commissioning of 24 Port 10/100/1000 Mbps PoE  
\_2020 : Switch.

Code	Description	Unit	Quantity	Rate	Amount
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MR	24 Port 10/100/1000 Mbps PoE Switch.	no	1.00000	25625.0 0	25625.00
Total Cost of Materials					25625.0
MR	Fixing charge	no	1.00000	1180.00	1180.00

TOTAL					26805.0
cost for one no					26805.0
Say					26805.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					26805.00
Say					26805.00

23 Specification Code: od19358/2019\_2020

od19358/2019\_2020 : Supply, Installation, Testing and commissioning of 6W Wall mount speakers with perforated metal grille with line matching transformer suitable for 4 ohm impedance 200 mm dia LBD 0606/10

Code	Description	Unit	Quantity	Rate	Amount
MR	6W Wall mount speakers with perforated metal grille with line matching transformer suitable for 4 ohm impedance 200 mm dia LBD 0606/10	no	1.00000	1100.00	1100.00
Total Cost of Materials					1100.0
MR	Labour Charges Per unit	no	1.00000	250.00	250.00
TOTAL					1350.0
cost for one no					1350.0
Say					1350.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					1350.00
Say					1350.00

24 Specification Code: od69992/2019\_2020

od69992/2019 Supply, installation, Testing and commissioning of 19" Flat Screen VGA colour  
\_2020 : monitor complete with all other accessories as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	19" Flat Screen VGA colour monitor	each	1.00000	7500.00	7500.00
	Add Cartage@1.00				75.00
	total				7575.00
TOTAL					7575.0
Add CPOH @ 15%					1136.25
cost for one each					8711.0
Say					8711.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					8711.00
Say					8711.00

25 Specification Code: od19350/2019\_2020

od19350/2019 Supply and laying of Cat6 Outdoor cable  
\_2020 :

Code	Description	Unit	Quantity	Rate	Amount
MR	Supply and laying of Cat6 Outdoor cable	metre	1.00000	45.00	45.00
TOTAL					45.0
cost for one metre					45.0
Say					45.0
Cost index <b>31.06 %</b>					.00

Total with Cost index	45.00
Say	45.00

**26** Specification Code: od19296/2019\_2020

od19296/2019\_2020 : Supply, installation, testing and commissioning of Promethean Board AB2T78 complete with all other accessories. Active inspire software will be complimentary with Promethean board.

Code	Description	Unit	Quantity	Rate	Amount
MR	Promethean Board AB2T78	no	1.00000	31000.00	31000.00
Total Cost of Materials					31000.0
MR	Installation charges for Promethean Board AB2T78	no	1.00000	3000.00	3000.00
TOTAL					34000.0
cost for one no					34000.0
Say					34000.0
Cost index 31.06 %					.00
Total with Cost index					34000.00
Say					34000.00

**27** Specification Code: od19301/2019\_2020

od19301/2019\_2020 : Supply, installation, testing, and commissioning of LT Projector and roof mount for LT projector complete with all accessories as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	SITC Of LT Projector	no	1.00000	20000.00	20000.00

MR	Roof mount for LT Projector	no	1.00000	1200.00	1200.00
MR	Installation charges of Projector and roof mount for projector complete with wire and accessories as required	set	1.00000	3390.00	3390.00

TOTAL					24590.0
cost for one set					24590.0
Say					24590.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					24590.00
Say					24590.00

NEW SMART CLASSROOM - ELV WORKS					
1 Specification Code: od19362/2019_2020					

od19362/2019  
\_2020 : Supply and drawing of CAT6 4 pair cable including all necessary connector.

Code	Description	Unit	Quantity	Rate	Amount
MR	CAT6 4 pair cable including all necessary connector.	metre	1.00000	21.00	21.00
Total Cost of Materials					21.0
MR	Fixing Charges	metre	1.00000	18.00	18.00
TOTAL					39.0
cost for one metre					39.0
Say					39.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					39.00
Say					39.00



2 Specification Code: od19147/2019\_2020

od19147/2019 Supply, installation, testing and commissioning of indoor IR IP dome camera 2 MP  
\_2020 : <br>2.1mm/4mm/6mm focal length lens capable to 1.0 lux sensitivity, with IR n  
480 TV lines.

Code	Description	Unit	Quantity	Rate	Amount
MR	Indoor IR IP dome camera 2 MP 2.1mm/4mm/6mm focal length lens capable to 1.0 lux sensitivity, with IR n 480 TV lines.	no	1.00000	5650.00	5650.00
Total Cost of Materials					5650.0
MR	Fixing Charges	no	1.00000	295.00	295.00
TOTAL					5945.0
cost for one no					5945.0
Say					5945.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					5945.00
Say					5945.00

3 Specification Code: od19266/2019\_2020

od19266/2019 Supply & laying of twin twisted 2x1.5 sqmm Cu flexible wire 1.1 kv grade PVC  
\_2020 : insulated through PVC conduit.

Code	Description	Unit	Quantity	Rate	Amount
MR	2x1.5 sqmm Cu flexible wire 1.1 kv grade PVC insulated through PVC conduit	metre	1.00000	48.00	48.00
Total Cost of Materials					48.0
MR	Fixing Charges	no	1.00000	21.24	21.24

TOTAL	69.24
cost for one no	69.0
Say	69.0

Cost index <b>31.06 %</b>	.00
Total with Cost index	69.00
Say	69.00

4 Specification Code: od18629/2019\_2020

od18629/2019 Supply, installation, testing and commissioning of LAN socket.  
\_2020 :

Code	Description	Unit	Quantity	Rate	Amount
MR	LAN Socket	no	1.00000	194.70	194.70
Total Cost of Materials					194.7
MR	Fixing charges per unit	no	1.00000	64.90	64.90
TOTAL					259.6
cost for one no					260.0
Say					260.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					260.00
Say					260.00

5 Specification Code: od18633/2019\_2020

od18633/2019 Supply and installation of GI box for modular switch installation including base  
\_2020 : plate and front plate 1/2 M

Code	Description	Unit	Quantity	Rate	Amount
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MR	GI box for modular switch installation including base plate and front plate 1/2 M	no	1.00000	56.64	56.64
MR	Installation charge per unit	no	1.00000	177.00	177.00

TOTAL					233.64
cost for one no					234.0
Say					234.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					234.00
Say					234.00

6 Specification Code: od19121/2019\_2020

Supply, installation, testing and commissioning of Bio Metric Finger Print scan od19121/2019 attendance system with LCD/LED display & keypad & TCPIP LAN, USB \_2020 : Connectivity along with Attendance monitoring & report software (Web based Terminal) Other Engineering Organisations

Code	Description	Unit	Quantity	Rate	Amount
MR	Bio Metric Finger Print scan attendance system with LCD/LED display & keypad & TCPIP LAN, USB Connectivity along with Attendance monitoring & report software (Web based Terminal)	no	1.00000	5750.00	5750.00
MR	Fixing Charges	no	1.00000	1850.00	1850.00
TOTAL					7600.0
cost for one no					7600.0
Say					7600.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					7600.00
Say					7600.00

7 Specification Code: od19358/2019\_2020

od19358/2019 Supply, Installation, Testing and commissioning of 6W Wall mount speakers with  
\_2020 : perforated metal grille with line matching transformer suitable for 4 ohm  
impedance 200 mm dia LBD 0606/10

Code	Description	Unit	Quantity	Rate	Amount
MR	6W Wall mount speakers with perforated metal grille with line matching transformer suitable for 4 ohm impedance 200 mm dia LBD 0606/10	no	1.00000	1100.00	1100.00
Total Cost of Materials					1100.0
MR	Labour Charges Per unit	no	1.00000	250.00	250.00
TOTAL					1350.0
cost for one no					1350.0
Say					1350.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					1350.00
Say					1350.00

8 Specification Code: od19301/2019\_2020

od19301/2019 Supply, installation, testing, and commissioning of LT Projector and roof mount for  
\_2020 : LT projector complete with all accessories as required.

Code	Description	Unit	Quantity	Rate	Amount
MR	SITC Of LT Projector	no	1.00000	20000.0 0	20000.00
MR	Roof mount for LT Projector	no	1.00000	1200.00	1200.00

MR	Installation charges of Projector and roof mount for projector complete with wire and accessories as required	set	1.00000	3390.00	3390.00
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				TOTAL	24590.0
				cost for one set	24590.0
				Say	24590.0
				Cost index <b>31.06 %</b>	.00
				Total with Cost index	24590.00
				Say	24590.00

9 Specification Code: od19296/2019\_2020

od19296/2019\_2020 : Supply, installation, testing and commissioning of Promethean Board AB2T78 complete with all other accessories. Active inspire software will be complimentary with Promethean board.

Code	Description	Unit	Quantity	Rate	Amount
MR	Promethean Board AB2T78	no	1.00000	31000.00	31000.00
Total Cost of Materials					31000.0
MR	Installation charges for Promethean Board AB2T78	no	1.00000	3000.00	3000.00
TOTAL					34000.0
cost for one no					34000.0
Say					34000.0
Cost index <b>31.06 %</b>					.00
Total with Cost index					34000.00
Say					34000.00